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ANNUAL LABOR AREA REPORT

STATE OF NEW YORK
MARIO M. CUOMO, GOVERNOR

DEPARTMENT OF LABOR
LILLIAN ROBERTS, COMMISSIONER

NEW YORK STATE DEPARTMENT OF LABOR
DIVISION OF RESEARCH AND STATISTICS
STATE OFFICE BUILDING CAMPUS
ALBANY, NEW YORK 12240

Jeremy P. Schrauf, Director

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INTRODUCTION

This Annual Labor Area Report was designed for employment and Training program administrators and planners, and others concerned with the state's economic condition and labor market. In addition to the New York State Department of Labor, included in this report are data obtained from the United States Department of Labor and the United States Department of Commerce-Bureau of the Census. Various sections of the report deal with the state's population, labor force, employment, unemployment, occupational supply and demand, and occupational projections.

The report is intended to be a source document for planners; it presents and interprets data but does not apply the data to specific planning situations.

For further information, contact:

State Analysis Unit
Building #12, Room 405
State Office Building Campus
Albany, New York 12240

Telephone: (518) 457-3800

HIGHLIGHTS

- New York State's population grew by an estimated 1.0 percent from the 1980 Census count to 17,735,000 in 1984, far short of the 4.2 percent increase in the nation as a whole. Almost 94 percent of the statewide upturn was confined to metropolitan areas. By 1990, the state's population is projected to reach 18,023,100, a gain of 2.6 percent from 1980.

- The state's civilian labor force expanded slightly to 8,089,000 in 1984, a new record high. Resident employment climbed to a new peak (7,505,000), while unemployment (584,000) dropped substantially to the lowest level and rate since 1979 (7.2 percent). Unemployment was reduced in all labor areas in the state from 1983 to 1984.

- Business conditions continued to improve in 1984 and nonagricultural wage and salary employment in the state reached a record high of 7,557,000. All major industry divisions contributed to the advance but over 6 in 10 new jobs were in trade and services establishments. The services, trade, and finance-insurance-real estate components piled up record high employment levels in 1984. In spite of the increase of 3.3 percent in the total nonfarm jobcount from 1983 to 1984, the state was unable to keep pace with the U.S. hike of 4.5 percent.

- Nearly all labor areas in the state marked higher nonfarm job levels in 1984, but expansions in the downstate area accounted for over 60 percent of the state's year-to-year gain.

- Recent projections call for over 300,000 new jobs in the nonagricultural wage and salary component from 1984 through 1986. A continuance of the long-term decline in factories will be more than offset by expected stepped-up hiring in services, trade and other nonfactory industries.

- Average weekly earnings of production workers in the state's factories were $366.96 in 1984, a new all-time high, and $19.55 (5.6 percent) above the 1983 average. The average length of the workweek rose from 39.3 hours in 1983 to 39.8 hours in 1984, as overtime was expanded from 2.5 to 3.0 hours.

- After adjustment for short-term openings and registries, there were 782,206 applicants registered with New York State Job Service offices from July through December 1984. A total of 183,608 job openings were received during the period. Both the largest number of applicants available (245,174) and openings listed (69,670) were in the clerical and sales category. A total of 500 or more job openings were recorded for 66 different occupations over the six-month period.

- An estimated 952,000 openings are expected annually in New York State from 1986 through 1988. Clerical jobs will require the greatest number of workers, totaling more than 244,000 openings annually. Over 184,000 professional and technical workers and 150,000 service workers will be needed to fill positions which will become available each year in the projected period.

POPULATION

Trends Since 1980

New York State's population stood at 17,735,000 on July 1, 1984, up about 177,000 or 1.0 percent from the 1980 Census count, according to recent provisional estimates of the U.S. Department of Commerce, Bureau of the Census. For the nation as a whole, an increase of 9,612,000 (+4.2 percent) occurred over the same period, bringing the total U.S. population to 236,158,000. About 91 percent of the overall U.S. growth since 1980 was confined to the South and West.

Three states--Ohio, Michigan and Iowa--and the District of Columbia, recorded population losses since 1980. Of the remaining states, New York's modest upturn of 1.0 percent was among the five lowest in the country. According to the Census Bureau, the fastest growing states were Alaska (+24.4 percent), Nevada (+13.8 percent), Utah (+13.0 percent), Florida (+12.6 percent) and Texas (+12.4 percent).

The Buffalo Consolidated Metropolitan Statistical Area (CMSA) (-38,000 or 3.1 percent) and the Elmira Metropolitan Statistical Area (MSA) (-4,200 or 4.3 percent) recorded the only reductions in population among major labor areas in the state over the four-year period. The Orange County Primary Metropolitan Statistical Area (PMSA) showed the greatest percentage gain (+5.4 percent) from 1980 to 1984. The New York PMSA and the Nassau-Suffolk PMSA increased by 101,900 and 47,600, respectively, and accounted for nearly 85 percent of the total statewide growth. The combined counties outside the metropolitan areas expanded by 11,300 or 0.7 percent from 1980 to 1984. (See Table 1.) Appendix Table A-1 shows population and percent change by county for the period 1980-1984.

Table 1. TOTAL POPULATION AND PERCENT CHANGE
NEW YORK STATE AND SELECTED AREAS
APRIL 1, 1980 AND ESTIMATED JULY 1, 1984

Area	April 1, 1980	July 1, 1984	Change 1980-1984	
			Net	Percent
New York State	17,558,072	17,735,000	176,928	1.0
Albany-Schenectady-Troy MSA	835,880	843,000	7,120	0.9
Binghamton MSA	263,460	264,100	640	0.2
Buffalo CMSA	1,242,826	1,204,800	-38,026	-3.1
Elmira MSA	97,656	93,500	-4,156	-4.3
Glens Falls MSA	109,649	111,600	1,951	1.8
Nassau-Suffolk PMSA	2,605,813	2,653,400	47,587	1.8
New York PMSA	8,274,961	8,376,900	101,939	1.2
New York City	7,071,639	7,164,800	93,161	1.3
Orange County PMSA	259,603	273,500	13,897	5.4
Poughkeepsie MSA	245,055	253,100	8,045	3.3
Rochester MSA	971,230	989,100	17,870	1.8
Syracuse MSA	642,971	650,500	7,529	1.2
Utica-Rome MSA	320,180	321,400	1,220	0.4
Metropolitan	15,869,284	16,034,900	165,616	1.0
Nonmetropolitan	1,688,788	1,700,100	11,312	0.7

NOTE: See page 142 of the Glossary for an explanation of geographic terms.
SOURCE: U.S. Department of Commerce, Bureau of the Census, 1980 Census of Population and Current Population Reports, Local Population Estimates, March 1985.

Population Projections

Official Population Projections for New York State Counties: 1980 to 2010, prepared by the New York State Department of Commerce, put the state's population at 17,774,500 for 1985, an increase of about 216,400 (+1.2 percent) from the 1980 Census tally. The total is projected to grow further to 18,023,100 in 1990, a ten-year gain of 2.6 percent. Metropolitan areas as a group were responsible for almost 95 percent of the 1980-1985 upturn and will continue to account for the bulk of the statewide advance through 1990. About 60 percent of the state's 1980-1990 growth will be concentrated in the Nassau-Suffolk PMSA (+130,300) and the New York PMSA (+147,200).

The Orange County PMSA (+12.8 percent) and the Poughkeepsie MSA (+9.5 percent) should record the greatest percentage hikes among metropolitan areas over the ten-year period with a combined expansion of over 56,000 residents. Population losses are projected for the Buffalo CMSA (-3.4 percent), Elmira MSA (-1.8 percent) and the Binghamton MSA (-0.6 percent) from 1980 to 1990. The population of the combined counties outside of the metropolitan areas is forecasted to grow by 5.0 percent over the decade, compared with an uptrend of 2.4 percent for all metropolitan areas combined. Substantial 1980-1990 advances in Jefferson (+34.1 percent) and Lewis (+17.2 percent) counties and a smaller increment in St. Lawrence County (+3.9 percent) reflect the decision of the U.S. Army to locate the 10th Infantry Division at Fort Drum in Jefferson County over the next several years. About 27,000 military personnel and their dependents will be transferred there. Population projections for the state and metropolitan areas are shown in Table 2; for county projections, see Appendix Table A-2.

Table 2. TOTAL POPULATION AND PERCENT CHANGE
NEW YORK STATE AND SELECTED AREAS
1980 AND PROJECTED 1985 AND 1990

Area	1980	1985	1990	Change 1980-1985		Change 1985-1990		Change 1980-1990	
				Net	Per-cent	Net	Per-cent	Net	Per-cent
New York State	17,558,072	17,774,520	18,023,052	216,448	1.2	248,532	1.4	464,980	2.6
Albany-Schenectady-Troy MSA	835,880	841,322	856,183	5,442	0.7	14,861	1.8	20,303	2.4
Binghamton MSA	263,460	261,771	261,914	-1,689	-0.6	143	0.1	-1,546	-0.6
Buffalo CMSA	1,242,826	1,209,011	1,201,030	-33,815	-2.7	-7,981	-0.7	-41,796	-3.4
Elmira MSA	97,656	96,111	95,871	-1,545	-1.6	-240	-0.2	-1,785	-1.8
Glens Falls MSA	109,649	111,602	115,664	1,953	1.8	4,062	3.6	6,015	5.5
Nassau Suffolk PMSA	2,605,813	2,653,911	2,736,111	48,098	1.8	82,200	3.1	130,298	5.0
New York PMSA	8,274,961	8,410,058	8,422,111	135,097	1.6	12,053	0.1	147,150	1.8
New York City	7,071,639	7,191,207	7,180,427	119,568	1.7	-10,780	-0.1	108,788	1.5
Orange County PMSA	259,603	275,152	292,775	15,549	6.0	17,623	6.4	33,172	12.8
Poughkeepsie MSA	245,055	256,563	268,450	11,508	4.7	11,887	4.6	23,395	9.5
Rochester MSA	971,230	992,204	1,015,387	20,974	2.2	23,183	2.3	44,157	4.5
Syracuse MSA	642,971	645,845	659,648	2,874	0.4	13,803	2.1	16,677	2.6
Utica-Rome MSA	320,180	320,631	325,236	451	0.1	4,605	1.4	5,056	1.6
Metropolitan	15,869,284	16,074,181	16,250,380	204,897	1.3	176,199	1.1	381,096	2.4
Nonmetropolitan	1,688,788	1,700,339	1,772,672	11,551	0.7	72,333	4.3	83,884	5.0

NOTE: See page 142 of the Glossary for an explanation of geographic terms.
SOURCE: New York State Department of Commerce, State Data Center.

New York State's female population is expected to expand by 2.4 percent from 1980 to 1990, while the number of males should increase by 3.0 percent. In 1990, women will still comprise over half (52.4 percent) of the state's total population.

The number of persons aged from 5 to 24 years is expected to shrink over the decade. Among the five-year age groups, the largest decline (-400,700 or 25.1 percent) will occur among teenagers between 15 and 19 years of age. The number of children under the age of five years is projected to reach 1,244,900 in 1990, a gain of 109,000 or 9.6 percent. This is the only age cohort under 25 years that is expected to expand over the decade. By 1990, a large segment of persons born during the "baby boom" will be in the 35-44 years of age bracket, causing this group to swell by 662,400 or 32.4 percent; this cohort will account for 15.0 percent of the total population in 1990, up from 11.6 percent in 1980. The population 65 years of age and over will reach 2,499,400 in 1990, 15.7 percent above 1980. (See Table 3.)

Table 3. POPULATION BY SELECTED AGE GROUP
NEW YORK STATE
1980 AND PROJECTED 1985 AND 1990

Age group	1980	1985	1990	Change 1980-1985		Change 1985-1990		Change 1980-1990	
				Net	Percent	Net	Percent	Net	Percent
Total, all ages	17,558,072	17,774,520	18,023,052	216,448	1.2	248,532	1.4	464,980	2.6
Under 15 years	3,726,864	3,505,692	3,561,120	-221,172	-5.9	55,428	1.6	-165,744	-4.4
15-19 years	1,598,571	1,390,114	1,197,853	-208,457	-13.0	-192,261	-13.8	-400,718	-25.1
20-24 years	1,519,946	1,579,971	1,334,066	60,025	3.9	-245,905	-15.6	-185,880	-12.2
25-34 years	2,780,215	2,910,770	3,070,225	130,555	4.7	159,455	5.5	290,010	10.4
35-44 years	2,043,219	2,426,832	2,705,655	383,613	18.8	278,823	11.5	662,436	32.4
45-54 years	1,908,113	1,810,482	1,949,324	-97,631	-5.1	138,842	7.7	41,211	2.2
55-64 years	1,820,377	1,830,860	1,705,436	10,483	0.6	-125,424	-6.9	-114,941	-6.3
65 years and over	2,160,767	2,319,799	2,499,373	159,032	7.4	179,574	7.7	338,606	15.7

SOURCE: New York State Department of Commerce, State Data Center.

Civilian Noninstitutional Population

Data from the U.S. Department of Labor, Bureau of Labor Statistics' Current Population Survey indicate that the state's civilian noninstitutional population aged 16 years and over climbed by 548,000 (4.2 percent) from 1974 to 13,633,000 in 1984. In the nation, the civilian noninstitutional population grew by a much faster pace (+17.5 percent) to 176,383,000 over the ten-year span (see Table 4).

Table 4. CIVILIAN NONINSTITUTIONAL POPULATION AGED 16 YEARS AND OVER NEW YORK STATE AND UNITED STATES 1974-1984

(Annual averages, numbers in thousands)

Year	New York State			United States		
	Total	Year-to-year change		Total	Year-to-year change	
		Net	Percent		Net	Percent
1974	13,085	28	0.2	150,120	3,024	2.1
1975	13,157	72	0.6	153,153	3,033	2.0
1976	13,222	65	0.5	156,150	2,997	2.0
1977	13,244	22	0.2	159,033	2,883	1.8
1978	13,253	9	0.1	161,910	2,877	1.8
1979	13,279	26	0.2	164,863	2,953	1.8
1980	13,313	34	0.3	167,745	2,882	1.7
1981	13,391	78	0.6	170,130	2,385	1.4
1982	13,464	73	0.5	172,271	2,141	1.3
1983	13,547	83	0.6	174,251	1,980	1.1
1984	13,633	86	0.6	176,383	2,132	1.2

SOURCE: U.S. Department of Labor, Bureau of Labor Statistics, Current Population Survey and Employment and Earnings, January 1985.

Since 1980, the civilian noninstitutional (CNI) population in New York State has increased by 2.4 percent (320,000), compared with a 5.1 percent gain nationwide. The slower performance in the state persisted among all major population groups except Hispanics. The number of men in the state was up by 189,000 (+3.1 percent) from 1980 to 6,327,000, while women rose by 131,000 (+1.8 percent) to 7,306,000. In the nation, the number of both men and women increased by about five percent over the last four years.

The white population in the state gained less than one percent from 1980 to 1984, while in the nation, it was up by 4.3 percent. Blacks in New York State increased by 120,000 (+6.8 percent) compared with 8.6 percent in the U.S. as a whole. The state's Hispanic population climbed 13.1 percent from 1980 to 1,217,000 in 1984, a slightly larger percentage change than in the nation (+11.0 percent). A sizable jump of 17.2 percent (+105,000) in the number of Hispanic women accounted for most of this group's statewide gain, and was larger than the 13.0 percent increase for Hispanic women in the U.S. Teenagers (aged 16-19 years) in both the state (-9.8 percent) and nation (-10.9 percent) declined over the period.

Table 5. CIVILIAN NONINSTITUTIONAL POPULATION 16 YEARS OF AGE AND OVER
BY SEX AND RACE
NEW YORK STATE AND UNITED STATES
1980 AND 1984

(Annual averages, numbers in thousands)

Population group	New York State				United States			
	1980	1984	Change 1980-1984		1980	1984	Change 1980-1984	
			Net	Percent			Net	Percent
Both sexes, 16 years and over	13,313	13,633	320	2.4	167,745	176,383	8,638	5.1
Male	6,138	6,327	189	3.1	79,398	83,605	4,207	5.3
Female	7,175	7,306	131	1.8	88,348	92,778	4,430	5.0
White	11,265	11,372	107	0.9	146,122	152,347	6,225	4.3
Male	5,243	5,319	76	1.4	69,634	72,723	3,089	4.4
Female	6,021	6,053	32	0.5	76,489	79,624	3,135	4.1
Black	1,771	1,891	120	6.8	17,824	19,348	1,524	8.6
Male	761	827	66	8.7	7,944	8,654	710	8.9
Female	1,010	1,063	53	5.2	9,880	10,694	814	8.2
Hispanic	1,076	1,217	141	13.1	8,901	9,881	980	11.0
Male	469	503	34	7.2	4,280	4,660	378	8.8
Female	609	714	105	17.2	4,622	5,222	600	13.0
16-19 years	1,310	1,181	-129	-9.8	16,543	14,735	-1,808	-10.9

SOURCE: U.S. Department of Labor, Bureau of Labor Statistics, Current Population Survey; Handbook of Labor Statistics, December 1983; and Employment and Earnings, January 1985.

CIVILIAN LABOR FORCE

Characteristics and Trends

New York State's civilian labor force--the number of residents 16 years of age and older either working or actively seeking work--expanded to 8,089,000 in 1984, a new record high. This marked an increase of 545,000 or 7.2 percent from ten years ago, and a slight gain (+38,000 or 0.5 percent) from 1983. In the nation, the civilian labor force reached 113,544,000, an upturn of over 23 percent from 1974, and 1.8 percent above 1983. New York State comprised 8.2 percent of the nation's labor force in 1974 but by 1984, the average had dropped to 7.1 percent.

The following table presents an annual average civilian labor force summary for New York State for the period 1974-1984:

Table 6. CIVILIAN LABOR FORCE SUMMARY
NEW YORK STATE
1974-1984

(Annual averages, numbers in thousands)

Year	Civilian labor force			
	Total	Employed	Unemployed	
			Total	Rate
1974	7,544	7,063	482	6.4
1975	7,636	6,908	727	9.5
1976	7,685	6,896	789	10.3
1977	7,728	7,023	705	9.1
1978	7,840	7,236	604	7.7
1979	8,010	7,439	571	7.1
1980	7,978	7,381	597	7.5
1981	8,012	7,400	612	7.6
1982	7,997	7,313	684	8.6
1983	8,051	7,363	688	8.6
1984	8,089	7,505	584	7.2

SOURCE: U.S. Department of Labor, Bureau of Labor Statistics, Current Population Survey.

The labor force participation rate for the total civilian noninstitutional population in New York State was virtually unchanged over the year, slipping from 59.4 percent in 1983 to 59.3 percent in 1984. Over the last ten years, the rate increased marginally from the early 1970's to a high of 60.3 percent in 1979 but then dropped somewhat and steadied for the last three years. The participation rate for women was 48.0 percent in 1984, also little changed over the year. The female rate increased steadily to a peak of 48.2 percent in 1981

but then declined slightly and remained fairly stable since 1982. At 72.4 percent in 1984, the rate for males was down from 73.2 percent in the previous year, and well below the ten-year peak of 75.9 percent in 1974.

Among whites in New York State, the labor force participation rate was 59.7 percent in 1984, unchanged from 1983, and off less than one percentage point from a high of 60.5 percent in 1979. The rate for white males at 73.5 percent was at a low for the ten-year period, while for white females, the rate remained at the 1983 peak of 47.6 percent. The rate for blacks in the state declined for the third consecutive year to 56.2 percent in 1984 as the rate for black men dipped to a low of 65.0 percent. Black women had a 1984 rate of 49.4 percent, up from 48.3 percent in 1983, and their rate continued at a higher level than the rate for all women. For Hispanics in New York State, the participation rate was 50.9 percent in 1984, an increase of two percentage points from 1983, with the greatest gain occurring among women.

In the nation, the civilian labor force participation rate for all persons rose slightly over the year from 64.0 percent in 1983 to 64.4 percent in 1984, the highest level on record. For men, the rate was unchanged from 1983 to 1984 at 76.4 percent, while for women it was up slightly to 53.6 percent, also a high for the series. Among selected groups in the nation, total whites (64.6 percent), white women (53.3 percent), total blacks (62.2 percent), black women (55.2 percent), total Hispanics (64.9 percent), and Hispanic women (49.9 percent) reached new record high levels of labor force participation in 1984. (See Table 7.)

Table 7. CIVILIAN LABOR FORCE PARTICIPATION RATES BY SEX AND RACE
NEW YORK STATE AND UNITED STATES
1974 - 1984

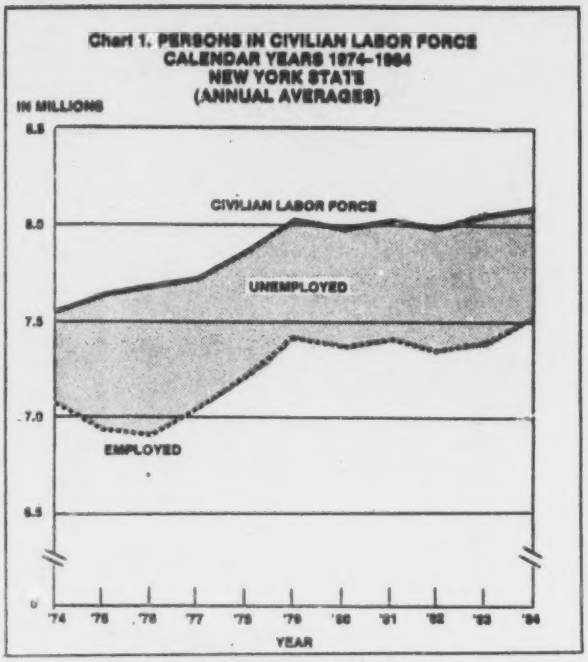
Year	All persons 16 and over			White			Black and other races *			Hispanic		
	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female
						New York State						
1974	57.7	75.9	42.0	57.9	76.4	41.7	56.1	72.0	44.4	ina	ina	ina
1975	58.0	75.7	43.0	58.4	76.6	42.6	55.5	69.4	45.5	ina	ina	ina
1976	58.1	75.1	43.5	58.5	76.0	42.9	55.7	68.4	46.6	ina	ina	ina
1977	58.3	74.7	44.3	58.6	75.4	43.8	56.6	69.5	47.3	50.8	74.6	33.6
1978	59.1	74.4	46.0	59.2	75.0	45.4	58.7	70.4	49.7	52.7	74.9	36.1
1979	60.3	75.1	47.6	60.5	75.7	47.1	59.5	71.1	50.9	52.6	72.9	37.7
1980	59.9	74.4	47.6	60.3	75.5	47.0	57.1	66.6	49.9	53.1	72.0	38.5
1981	59.8	73.3	48.2	60.0	74.2	47.5	58.8	68.2	51.8	51.8	68.9	37.7
1982	59.4	73.0	47.7	59.6	73.7	47.3	57.1	67.4	49.4	50.8	69.9	35.8
1983	59.4	73.2	47.9	59.7	74.0	47.6	56.4	67.2	48.3	48.9	70.1	33.9
1984	59.3	72.4	48.0	59.7	73.5	47.6	56.2	65.0	49.4	50.9	70.6	37.1
						United States						
1974	61.3	78.7	45.7	61.5	79.4	45.2	60.3	73.3	49.1	61.1	81.7	42.4
1975	61.2	77.9	46.3	61.5	78.7	45.9	59.6	71.5	49.2	60.8	80.7	43.2
1976	61.6	77.5	47.3	61.8	78.4	46.9	59.8	71.2	50.4	60.8	79.6	44.3
1977	62.3	77.7	48.4	62.5	78.5	48.1	60.4	71.6	51.1	61.6	80.9	44.3
1978	63.2	77.9	50.0	63.3	78.6	49.5	62.2	72.6	53.5	62.9	81.1	46.6
1979	63.7	77.8	50.9	63.9	78.6	50.6	62.2	72.5	53.7	63.6	81.3	47.4
1980	63.8	77.4	51.5	64.1	78.2	51.2	61.0	70.6	53.2	64.0	81.6	47.8
1981	63.9	77.0	52.1	64.3	77.9	51.9	60.8	70.0	53.5	64.1	80.8	48.5
1982	64.0	76.6	52.6	64.3	77.4	52.4	61.0	70.1	53.7	63.6	79.1	47.8
1983	64.0	76.4	52.9	64.3	77.1	52.7	61.5	70.6	54.2	63.8	80.8	48.5
1984	64.4	76.4	53.6	64.6	77.1	53.3	62.2	70.8	55.2	64.9	80.5	49.9

* 1974-1979 data include all races except white. Beginning with 1980, data are for blacks only.
ina = information not available.

SOURCE: U.S. Department of Labor, Bureau of Labor Statistics, Current Population Survey; Employment and Earnings, January 1984 and January 1985; Handbook of Labor Statistics, December 1980 and December 1983; and Labor Force Statistics Derived from the Current Population Survey: A Databook, Volume 1, September 1982.

Resident Employment and Unemployment

Resident employment in New York State swelled to 7,505,000 in 1984, a new record high for the current series of data which began in 1970, and 142,000 (+1.9 percent) above the 1983 level. Despite the improvement from year-to-year, the change was less than half as large as the 4.1 percent advance recorded for the nation and considerably smaller than the expansions registered in other large states. More extensive hiring occurred in California (+448,000 or 4.0 percent), Florida (+269,000 or 6.0 percent), Michigan (+192,000 or 5.2 percent), New Jersey (+207,000 or 6.1 percent) and Texas (+360,000 or 5.1 percent).



SOURCE: U.S. DEPT. OF LABOR, BUREAU OF LABOR STATISTICS, CURRENT POPULATION SURVEY

All of the state's major labor areas contributed to the gain since 1983 with the Nassau-Suffolk PMSA (+46,800) and New York PMSA (+42,900) each accounting for about one-third of the increase. Among major areas upstate, the Albany-Schenectady-Troy MSA had the largest advance (+10,600) over the year. The combined counties outside of the major labor areas added about 8,200 workers from 1983 to 1984.

The number of unemployed New York State residents dropped substantially to 584,000 in 1984, off 104,000 from 1983. This was the lowest statewide average since 1979, when it was 571,000. As a percent of the civilian labor force, unemployment was 7.2 percent in 1984, down significantly from 8.6 percent in 1983, and at its lowest point since 1979. All of the state's major labor areas registered decreases in both the number and rate of unemployment over the year. Nationwide, total joblessness was 8,539,000 in 1984, down from 10,717,000 in 1983 while the rate decreased from 9.6 percent to 7.5 percent over the year. All 50 states contributed to the reduction since 1983. Additional information on unemployment begins on page 17.

Full-time and Part-time Status

The number of persons in New York State's full-time labor force was up 43,000 from 1983 to 6,969,000 in 1984. Those employed on full-time schedules increased by 19,300 over the year while those employed part-time for economic reasons, as well as those unemployed looking for full-time work both declined from 1983 to 1984. Since 1975*, the state's full-time labor force has grown by nearly 380,000 with those employed full-time rising by 445,000. Those employed part-time for economic reasons expanded by 54,000, while the unemployed looking for full-time work declined by 120,000 from 1975 to 1984.

* Data were not compiled for 1973 and 1974.

Since 1980, the number of women in the state's full-time labor force expanded by 87,000, while the number of men climbed by 52,000. Women employed part-time for economic reasons, as well as those unemployed looking for full-time work declined from 1980 to 1984, while the number of men in both categories was up over the four-year period.

In New York State, the part-time labor force dropped by 5,000 from 1983 to 1984 because of a decrease in persons unemployed who were looking for part-time work (-19,000). This decline more than offset a gain of 13,000 in the number of persons voluntarily employed part-time. Since 1975, the part-time labor force has grown by 75,000, with employment up by 97,000 and unemployment off by 22,000.

The number of women in the part-time labor force was unchanged from 1980 to 1984, remaining at 777,000 or almost 70 percent of the total. The number of men declined by 41,000 to 343,000. For more detail on the full- and part-time labor force, see Appendix Table A-8.

Outlook

Projections prepared by the New York State Division of the Budget indicate that the count of persons in the state's civilian labor force will continue upward through 1986. Resident employment should increase by roughly 270,000 or 3.6 percent from 1984 through 1986. Total unemployment is expected to retreat by about 25,000 to a level of 560,000 in 1986; these changes should force the jobless rate downward to approximately 6.7 percent.

UNEMPLOYMENT

Recent Trends

After worsening for four straight years, annual average unemployment in New York State dropped sharply from 688,000 (8.6 percent) in 1983 to 584,000 (7.2 percent) in 1984. Except for 1979, when the jobless figure stood at 571,000 (7.1 percent), 1984's total and rate were the lowest since 1974.

The state's unemployment rate remained below the nation's for the third year in a row but the gap between the two narrowed to only 0.3 percentage point in 1984. Other large industrial states, some of which had pushed the national average jobless rate upward more than New York during the 1981-1982 recession, also had more pronounced reductions in unemployment from 1983 to 1984. Average total unemployment for New York narrowed by 15.1 percent over the year compared with a drop of 20.3 percent in the U.S. and these percentage decreases for other large states: California (-18.0), Florida (-24.1), Illinois (-20.2), Michigan (-19.7), New Jersey (-18.1), Ohio (-22.5), Pennsylvania (-23.2) and Texas (-23.6).

The national jobless rate slid from 9.6 percent in 1983 to 7.5 percent in 1984 as all 50 states and the District of Columbia experienced lower unemployment rates from year-to-year. New Hampshire and South Dakota tied for the lowest rate (4.3 percent), while West Virginia, at 15.0 percent, registered the highest unemployment rate among all of the states for the second year in a row. The largest year-to-year rate decrease occurred in Arizona, where the average fell from 9.1 percent in 1983 to 5.0 percent in 1984.

There were 27 states with lower unemployment rates than New York State's 7.2 percent in 1984. Among neighboring states, only Pennsylvania (9.1 percent) had a rate higher than New York. Rates for Connecticut (4.6 percent), Massachusetts (4.8 percent), Vermont (5.2 percent), and New Jersey (6.2 percent) were all well below the 1984 New York State figure.

Among the state's major labor areas, the Buffalo CMSA continued to have the highest 1984 rate at 9.1 percent (down from 12.0 percent in 1983), while Poughkeepsie had the lowest at 4.5 percent (down from 6.2 percent in 1983).

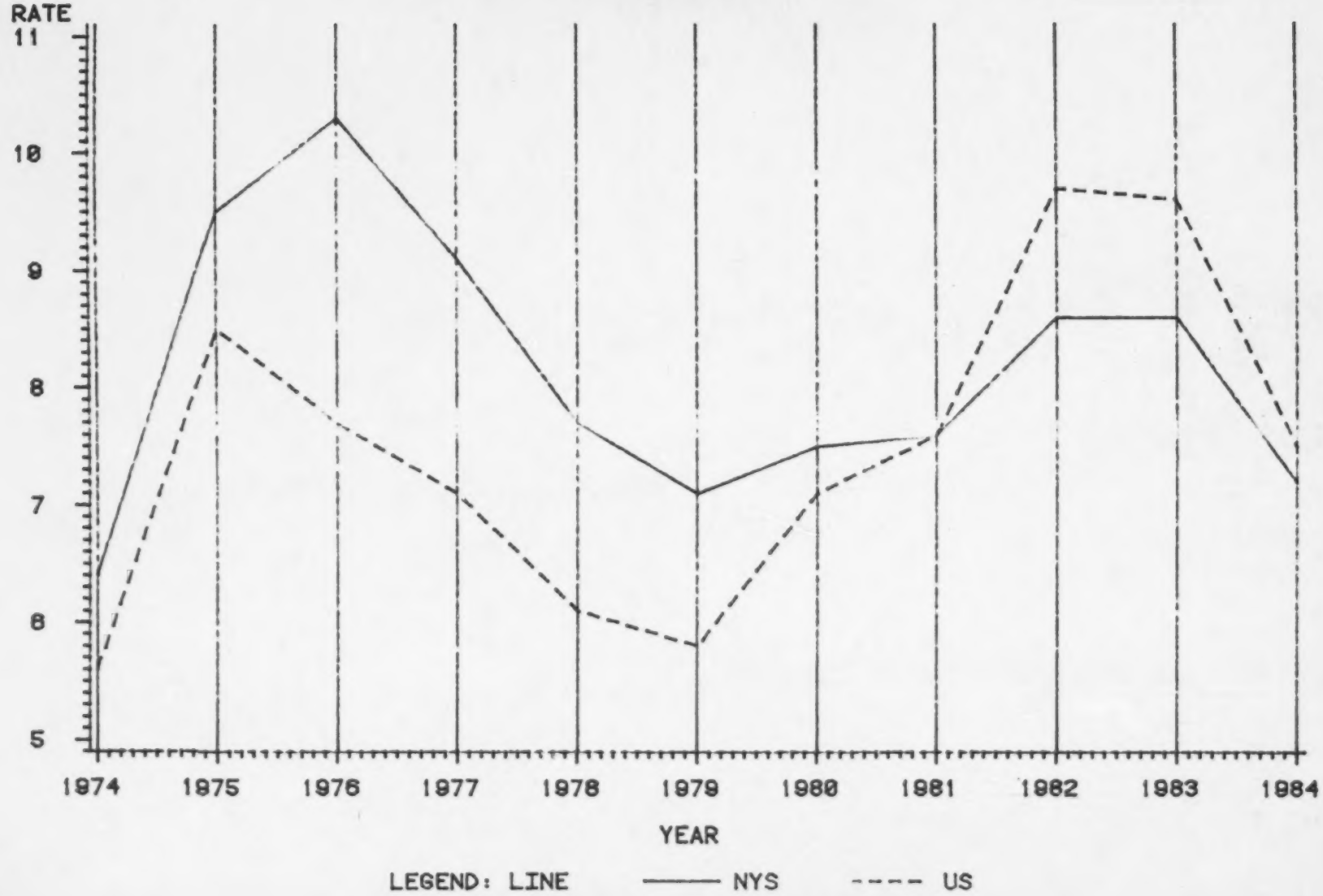
Table 8. NUMBER UNEMPLOYED AND UNEMPLOYMENT RATES
NEW YORK STATE AND UNITED STATES
1974 - 1984

(Annual averages)

Year	Number (totals in 000's)				Unemployment rate	
	New York State	Percent change from previous year	United States	Percent change from previous year	New York State	United States
1974	482	19.3	5,156	18.1	6.4	5.6
1975	727	50.8	7,929	53.8	9.5	8.5
1976	789	8.5	7,406	-6.6	10.3	7.7
1977	705	-10.6	6,991	-5.6	9.1	7.1
1978	604	-14.3	6,202	-11.3	7.7	6.1
1979	571	-5.5	6,137	-1.0	7.1	5.8
1980	597	4.6	7,637	24.4	7.5	7.1
1981	612	2.5	8,273	8.3	7.6	7.6
1982	684	11.8	10,678	29.1	8.6	9.7
1983	688	0.6	10,717	0.4	8.6	9.6
1984	584	-15.1	8,539	-20.3	7.2	7.5

SOURCE: U.S. Department of Labor, Bureau of Labor Statistics, Current Population Survey.

CHART 2. ANNUAL AVERAGE UNEMPLOYMENT RATES
NEW YORK STATE AND UNITED STATES
1974–1984



Reasons for Unemployment

The Current Population Survey categorizes unemployment according to the status of individuals at the time they began to look for work. The reasons for unemployment are divided into four major groups:

1. Job losers--persons whose employment ended involuntarily and who immediately began looking for work, and persons on layoff.

2. Job leavers--persons who quit or otherwise terminated their employment voluntarily and immediately began looking for work.

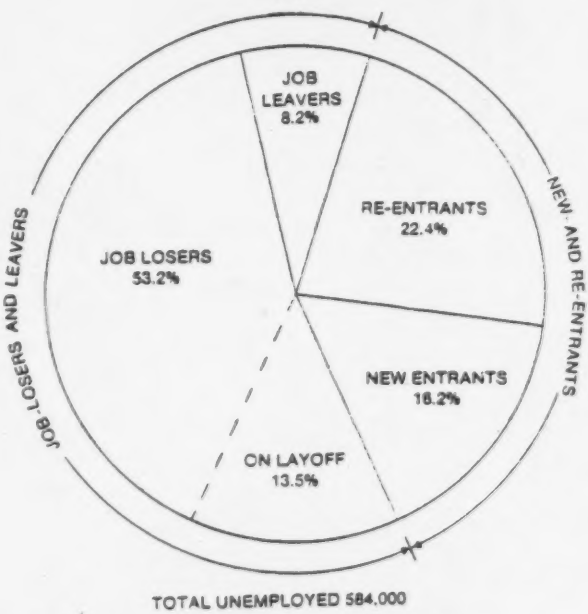
3. Reentrants--persons who previously worked at a full-time job lasting two weeks or longer but were out of the labor force before beginning their most recent efforts to look for work.

4. New entrants--persons who never worked at a full-time job lasting two weeks or longer.

General economic trends in the state or nation are usually reflected in changes in the reasons for unemployment. Slackening business conditions and corresponding layoffs result in larger proportions of job losers; job opportunities become relatively scarce and fewer people quit or leave jobs or enter or reenter the labor force. Conversely, improving conditions result in fewer layoffs; people become more willing to leave their jobs to look for better opportunities and the greater availability of jobs draws people into the labor market.

Improved economic conditions and a more optimistic outlook among jobseekers in 1984 were reflected in both state and national data. Job losers (as a proportion of the total unemployed) in the state declined from 59.3 percent in 1983 to 53.2 percent in 1984 (the lowest percentage since 1979), while in the nation the percentage dropped from 58.4 percent to 51.8 percent. The job leaver, reentrant and new entrant categories all expanded from 1983 to 1984 in both New York State and the United States. In 1984, the percentage of new entrants into the labor force was slightly higher in the state than in the nation (16.2 percent versus 13.0 percent) while job leaver and reentrant percentages were somewhat lower.

Chart 3. REASONS FOR UNEMPLOYMENT
PERSONS 16 YEARS AND OVER
NEW YORK STATE
1984



TOTAL UNEMPLOYED 584,000

SOURCE: U.S. DEPT. OF LABOR, BUREAU OF LABOR STATISTICS, *CURRENT POPULATION SURVEY*

The proportion of job losers declined from 1983 to 1984 among all population groups for which data are available, with the largest percentage drop occurring among Hispanics (-13.2 percentage points to 50.6 percent). In the nation, Hispanic job losers made up 56.9 percent of the Hispanic unemployed, down from 63.0 percent in 1983. The percentages of the unemployed who were job leavers were up among all population groups from 1983 to 1984 with the largest increases among females and whites. Teenage job loser and reentrant percentages were reduced in the state from 1983 to 1984 while the teenage job leaver and new entrant groups experienced increases. New entrants showed their greatest uptrend among blacks (up 5.6 percentage points from 1983 to 20.9 percent in 1984) while white new entrants dropped from 15.4 percent to 14.3 percent in 1984. Appendix Table A-9 shows historical data on reasons for unemployment for the total unemployed in New York State as well as for selected demographic groups.

Table 9. PERCENT DISTRIBUTION OF THE UNEMPLOYED, BY REASON
NEW YORK STATE AND UNITED STATES
1983 AND 1984
(Annual averages)

Reason	New York State		United States		Difference N.Y. - U.S.	
	1983	1984	1983	1984	1983	1984
All reasons	100.0	100.0	100.0	100.0	-	-
Job losers	59.3	53.2	58.4	51.8	0.9	1.4
On layoff	15.4	13.5	16.6	13.7	-1.2	-0.2
Job leavers	6.0	8.2	7.7	9.6	-1.7	-1.4
Reentrants	19.3	22.4	22.5	25.6	-3.2	-3.2
New entrants	15.4	16.2	11.3	13.0	4.1	3.2

NOTE: Detail may not add to total due to rounding.
SOURCE: U.S. Department of Labor, Bureau of Labor Statistics, Current Population Survey and Employment and Earnings, January 1985.

Duration of Unemployment

A decrease in the average duration of unemployment is another indicator of an improved economy. In New York State, the average spell of joblessness declined slightly from 20.1 weeks in 1983 to 19.6 weeks in 1984. Nationwide, the drop was more significant--from 20.0 to 18.2 weeks over the year.

About one-third of the state's unemployed were out of work less than five weeks in 1984, compared with nearly 40 percent in the U.S. The proportion of those without a job for 5-14 weeks was up slightly in both the state and nation over the year. Those unemployed for longer periods (15 weeks and over) fell from 41.0 percent in 1983 to 36.3 percent in 1984 in the state, while in the U.S. the proportion was down from 39.3 percent to 32.1 percent. Table 10 shows information on the duration of unemployment in New York State and the United States for 1983 and 1984.

Table 10. PERCENT DISTRIBUTION OF THE UNEMPLOYED BY DURATION OF UNEMPLOYMENT NEW YORK STATE AND UNITED STATES 1983 AND 1984

(Annual averages)

Duration	New York State		United States		Difference N.Y. - U.S.	
	1983	1984	1983	1984	1983	1984
Total unemployed	100.0	100.0	100.0	100.0	-	-
Less than 5 weeks	30.0	33.7	33.3	39.2	-3.3	-5.5
5-14 weeks	29.1	30.0	27.4	28.7	1.7	1.3
15+ weeks	41.0	36.3	39.3	32.1	1.7	4.2
27+ weeks	23.2	21.3	23.9	19.1	-0.7	2.1
Mean duration (in weeks)	20.1	19.6	20.0	18.2	0.1	1.4

NOTE: Detail may not add to total due to rounding.
SOURCE: U.S. Department of Labor, Bureau of Labor Statistics, Current Population Survey and Employment and Earnings, January 1985.

The average duration of unemployment was down among almost all population groups for which data are available from 1983 to 1984 in the state. The largest year-to-year decline occurred among Hispanics where the average duration fell from 18.1 weeks to 14.1 weeks in 1984. In the nation, the mean duration for this group decreased from 16.0 weeks to 13.7 weeks. In both the state and United States, males and black persons tend to have longer-than-average spells of unemployment. In New York State, the mean duration of joblessness for blacks was 22.2 weeks in 1984 (down from 24.5 weeks in 1983), while for males it was 22.3 weeks (down slightly from 22.9 weeks). In the nation, the average duration of unemployment for blacks was 20.8 weeks in 1984 (down from 22.3 weeks), and 21.1 weeks for males (down from 22.7 weeks). Despite their higher-than-average duration of unemployment, significant drops occurred over the year in the proportion of total males and total blacks out of work for 15 weeks or more in the state. (See Appendix Table A-10 for historical data on the duration of unemployment in the state among all persons 16 years and over and for men, women, whites, blacks, Hispanics, and youths aged 16-19 years.)

Unemployment by Age and Sex

The youth (16-19 year old) unemployment rate in New York State narrowed from 24.8 percent in 1983 to 19.4 percent in 1984; this was the lowest rate since 1974, when it stood at 18.8 percent. Teenagers declined from nearly one-fifth of the total jobless in the state in 1983 to 16.6 percent in 1984 but this was still disproportionately high compared to their proportion in the civilian labor force (6.1 percent). The national teenage jobless rate moved downward from 22.4 percent to 18.9 percent over the year. Youths made up 17.6 percent of total unemployed in the U.S. in 1984, up slightly from 1983 (17.1 percent).

Table 11. ANNUAL AVERAGE UNEMPLOYMENT RATES OF PERSONS AGED 16 AND OVER BY SEX AND SELECTED AGE GROUP NEW YORK STATE AND UNITED STATES 1983 AND 1984

Area and group	New York State		United States	
	1983	1984	1983	1984
All persons, 16 years and over	8.6	7.2	9.6	7.5
Males	8.9	7.3	9.9	7.4
Females	8.1	7.2	9.2	7.6
Both sexes, 20 years and over	7.4	6.4	8.6	6.7
Males	7.8	6.5	8.9	6.6
Females	6.9	6.3	8.1	6.8
Both sexes, 16-19 years	24.8	19.4	22.4	18.9

SOURCE: U.S. Department of Labor, Bureau of Labor Statistics, Current Population Survey and Employment and Earnings, January 1985.

Young adults (aged 20 to 24) in New York State also comprised a higher share of total unemployment (23.8 percent) than of the civilian labor force (13.8 percent) in 1984. The same was true for the U.S. (21.5 percent of the unemployed versus 14.1 percent of the civilian labor force).

Persons in the prime working age group (25-44 years) accounted for 40.6 percent of New York State's unemployed in 1984 (up slightly from 39.8 percent in 1983) and 48.4 percent of the labor force. The same relationship held true in the nation; persons aged 25-44 years made up a smaller proportion of the unemployed (43.4 percent) than of the total civilian labor force (50.8 percent).

Older workers (aged 55 and older) accounted for 8.2 percent of the state's unemployed in 1984, virtually unchanged from the previous year. In the U.S., older workers comprised 7.8 percent of the total jobless. In the state (15.1 percent) and nation (13.1 percent) their portion of the labor force was much larger.

The unemployment rate for women in New York declined from 8.1 percent in 1983 to 7.2 percent in 1984, the lowest rate for this group since 1974, when it was also 7.2 percent. The reduction in the jobless rate for men was more significant, from 8.9 to 7.3 percent in 1984, the lowest rate for this group since 1979, when it was 6.7 percent. Nationally, the female rate dropped from 9.2 percent to 7.6 percent over the year, while the male unemployment rate slipped to 7.4 percent, down considerably from 9.9 percent in 1983.

Table 12. PERCENT DISTRIBUTION OF UNEMPLOYED PERSONS AGED 16 AND OVER BY SEX AND AGE GROUP NEW YORK STATE AND UNITED STATES 1983 AND 1984

(Annual averages)

Group	New York State		United States		Difference N.Y. - U.S.	
	1983	1984	1983	1984	1983	1984
Total 16 years and over	100.0	100.0	100.0	100.0	-	-
16-19 years	19.6	16.6	17.1	17.6	2.5	-1.0
20-24 years	21.9	23.8	21.7	21.5	0.2	2.3
25-44 years	39.8	40.6	44.1	43.4	-4.3	-2.8
45-54 years	10.6	10.8	9.7	9.7	0.9	1.1
55-64 years	6.5	6.8	6.3	6.6	0.2	0.2
65 and over	1.6	1.4	1.1	1.1	0.5	0.3
Total males	58.8	56.8	58.4	55.6	0.4	1.2
16-19 years	10.9	8.9	9.4	9.5	1.5	-0.6
20-24 years	13.6	15.2	12.8	12.0	0.8	3.2
25-44 years	23.4	22.6	25.8	24.0	-2.4	-1.4
45-54 years	6.1	6.0	5.7	5.3	0.4	0.7
55-64 years	3.9	3.6	4.0	4.2	-0.1	-0.6
65 and over	0.9	0.3	0.7	0.6	0.2	-0.3
Total females	41.2	43.0	41.6	44.4	-0.4	-1.4
16-19 years	8.9	7.5	7.7	8.0	1.2	-0.5
20-24 years	8.3	8.6	9.0	9.5	-0.7	-0.9
25-44 years	16.4	18.0	18.3	19.4	-1.9	-1.4
45-54 years	4.5	4.8	4.0	4.4	0.5	0.4
55-64 years	2.6	3.3	2.3	2.5	0.3	0.8
65 and over	0.7	0.9	0.4	0.5	0.3	0.4

NOTE: Detail may not add to total due to rounding.
SOURCE: U.S. Department of Labor, Bureau of Labor Statistics, Current Population Survey and Employment and Earnings, January 1984 and January 1985.

Unemployment by Selected Population Group

Although their unemployment rate declined from 14.5 percent in 1983 to 13.3 percent in 1984, blacks made up a greater proportion of the state's total unemployed, rising from 21.4 percent to 24.1 percent. In the nation, the black unemployment rate dropped from 19.5 to 15.9 percent over the year, while their proportion among the total jobless rose slightly from 21.2 to 22.4 percent.

Table 13. ANNUAL AVERAGE UNEMPLOYMENT RATES OF PERSONS AGED 16 AND OVER BY SELECTED POPULATION GROUP NEW YORK STATE AND UNITED STATES 1983 AND 1984

Group	New York State		United States	
	1983	1984	1983	1984
All persons, 16 years and over	8.6	7.2	9.6	7.5
White	7.7	6.3	8.4	6.5
Black	14.5	13.3	19.5	15.9
Hispanic	12.2	12.2	13.7	10.6
Males	8.9	7.3	9.9	7.4
White	7.8	6.3	8.8	6.4
Black	17.5	14.3	20.3	16.4
Hispanic	11.9	11.6	13.5	10.4
Females	8.1	7.2	9.2	7.6
White	7.5	6.3	7.9	6.5
Black	11.3	12.3	18.6	15.4
Hispanic	12.7	13.0	13.8	11.0

SOURCE: U.S. Department of Labor, Bureau of Labor Statistics, Current Population Survey and Employment and Earnings, January 1985.

Representation of Hispanics among the state's unemployed increased from 10.0 percent in 1983 to 13.0 percent in 1984 but their unemployment rate was unchanged at 12.2 percent. Although the Hispanic percentage of the unemployed in the U.S. was virtually unchanged from 1983 to 1984, their unemployment rate declined from 13.7 percent to 10.6 percent.

Over the year, the proportion of whites among the unemployed as well as their unemployment rates were down in both New York State and the United States. In 1983, whites comprised 76.0 percent of the total jobless in New York, while in 1984 they comprised 72.9 percent. The decline in the nation was not as large; the percentage of whites tapered from 75.8 in 1983 to 74.6 in 1984. The white unemployment rate in the state dropped from 7.7 percent in 1983 to 6.3 percent in 1984, while in the nation, it decreased from 8.4 percent to 6.5 percent.

Table 14. PERCENT DISTRIBUTION OF UNEMPLOYED PERSONS AGED 16 AND OVER BY SEX AND SELECTED POPULATION GROUP NEW YORK STATE AND UNITED STATES 1983 AND 1984

Group	New York State		United States	
	1983	1984	1983	1984
All persons 16 years and over	100.0	100.0	100.0	100.0
White	76.0	72.9	75.8	74.6
Black	21.4	24.1	21.2	22.4
Hispanic	10.0	13.0	7.8	7.9
Males	58.7	56.8	58.4	55.6
White	44.3	42.1	45.3	42.2
Black	13.2	13.2	11.3	11.7
Hispanic	5.8	7.0	4.6	4.6
Females	41.3	43.0	41.6	44.4
White	31.8	31.0	30.5	32.5
Black	8.1	11.1	9.9	10.7
Hispanic	4.2	6.0	3.2	3.3

NOTE: Hispanics may be of any race; thus, they may be included in either the white or black population.

SOURCE: U.S. Department of Labor, Bureau of Labor Statistics, Current Population Survey and Employment and Earnings, January 1985.

Unemployment Covered by Unemployment Insurance

Another indication of the uptrend in the state's economy was the sharp reduction of nearly 168,000 or 18 percent since 1983 in the number of different individuals receiving unemployment benefits. A basic difference between UI beneficiaries and individuals not covered by unemployment insurance is that beneficiaries have had recent work experience and are usually not recent or new entrants into the labor force; for the most part they are job losers rather than job leavers. Recent entrants or job leavers are generally ineligible for or not entitled to unemployment (UI) benefits.

Significant characteristics of the 775,443 individuals receiving UI benefits in New York State during 1984 include the following:

- Only 2.5 percent of the total were under 20 years of age reflecting the fact that most of the unemployed in this age group lacked the qualifying work experience which would make them eligible to collect unemployment insurance benefits. Persons in the prime working age group (25-44 years) comprised nearly half (49.1 percent) of the total receiving benefits but they comprised only about 40 percent of the total unemployed. Older workers (55 years and over) accounted for about 15 percent of beneficiaries, but only 8.2 percent of the total jobless. Beneficiaries were reduced in all age groups from year-to-year but the biggest change was in the under 20 (-29.8 percent) age group.

- The occupational distribution of beneficiaries was nearly unchanged from 1983 to 1984. Over half (54.5 percent) of all UI beneficiaries were blue-collar workers. Clerical workers accounted for another 14.8 percent in 1984, while service workers comprised 10.9 percent. The remaining major occupational groups combined made up less than 10 percent of the total. All major occupational categories turned downward over the year.

- Information on industry of last employment shows that 30.9 percent of UI beneficiaries in 1984 were formerly manufacturing workers, down slightly from 33.8 percent in 1983. The proportion of those from nondurable goods industries was up 0.6 percentage point over the year while the durable goods proportion was down 3.6 percentage points. Among nonmanufacturing industreis, former service (19.7 percent), trade (17.5 percent), and construction (11.5 percent) workers made up the largest group of beneficiaries in 1984. Totals for all individual industry groups were reduced from 1983 to 1984.

- Just under two-thirds (64.3 percent) of the 1984 beneficiaries had completed at least 12 years of schooling; slightly over one in ten had 16 years of school or more.

- Minorities accounted for 27.6 percent of all beneficiaries in 1984, up from 25.3 percent in 1983. Blacks comprised 13.2 percent, while Hispanics made up 11.2 percent.

- Women made up 42.5 percent of the 1984 total, up one percentage point from 1983. Nearly 43 percent of the female beneficiaries last worked in blue-collar occupations in 1984, while another 26.3 percent were former clerical workers. Industry of last employment shows that 37.1 percent of women were from manufacturing industries, 24.7 percent from services and 18.4 percent from trade.

Table 15 presents a summary of selected characteristics of individuals receiving unemployment insurance benefits in New York State in 1984.

Table 15. SELECTED CHARACTERISTICS OF INDIVIDUALS RECEIVING UNEMPLOYMENT INSURANCE BENEFITS, REGULAR PROGRAM
NEW YORK STATE
1984

Characteristics	Number	Percent of total
	Age groups	
All ages	775,443	100.0
Under 20 years	19,485	2.5
20-24 years	119,072	15.4
25-34 years	228,069	29.4
35-39 years	83,227	10.7
40-44 years	69,806	9.0
45-54 years	118,423	15.3
55-59 years	56,003	7.2
60-64 years	38,956	5.0
65 and over	19,654	2.5
Unknown	22,748	2.9
	Race/ethnic group	
All groups	775,443	100.0
White 1/	529,500	68.3
Black 1/	102,189	13.2
American Indian	3,478	0.4
Other nonwhite	21,801	2.8
Hispanic	86,743	11.2
Unknown/unreported	31,732	4.1
	Years of education	
All groups	775,443	100.0
Less than 8 years	56,779	7.3
8 years	40,297	5.2
9 to 11 years	134,739	17.4
12 years	298,503	38.5
13 to 15 years	116,946	15.1
16 years and over	82,860	10.7
Unreported	45,319	5.8
	Occupational group	
All occupations	775,443	100.0
Professional	53,315	6.9
Technical	15,083	1.9
Managerial	29,686	3.8
Clerical	114,696	14.8
Sales	25,769	3.3
Blue collar	422,336	54.5
Farming, forestry, fishery	4,055	0.5
Service (except private household)	84,311	10.9
Private household service	1,760	0.2
Unknown/unreported	24,432	3.2

Table 15. (continued)

Characteristics	Number	Percent of total
	Industry of last employment	
All industries	775,443	100.0
Manufacturing	239,274	30.9
Durable goods	95,727	12.3
Nondurable goods	143,547	18.5
Nonmanufacturing (exluding government)	466,944	60.2
Agriculture and related	10,173	1.3
Mining	1,906	0.2
Construction	89,020	11.5
Transportation and public utilities	40,718	5.3
Trade	135,915	17.5
Wholesale	45,475	5.9
Retail	90,440	11.7
Finance, insurance and real estate	36,790	4.7
Services	152,422	19.7
Government	39,196	5.1
Unknown/unreported	30,029	3.9

1. Excludes Hispanics.

NOTE: Data relate to beneficiaries in Regular Program (first 26 weeks of unemployment insurance compensation).

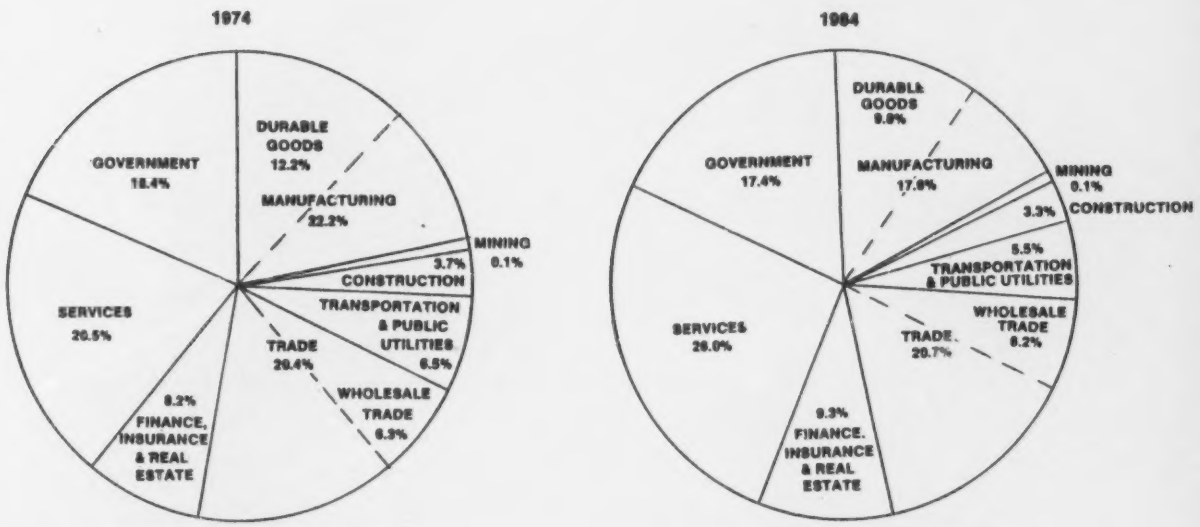
NONAGRICULTURAL WAGE AND SALARY EMPLOYMENT

Long-Term Trends: 1974-1984

The state job picture was influenced by a total of three national economic slowdowns in the last 10 years--late 1973 through early 1975; the first half of 1980; and mid-1981 to late 1982. There was some "lag effect" in New York State from the first downturn--layoffs continued in some categories through 1975 and 1976. Setbacks were not as severe in the two more recent recessions.

The general shift of jobs from manufacturing to nonmanufacturing became more pronounced in both the U.S. and New York State in the last 10 years. Manufacturing was the biggest employer in the nation in 1974 (25.7 percent of all nonfarm jobs) but by 1984 it ranked third (20.8 percent) behind trade (23.1 percent) and services (21.9 percent). The trend in New York was generally the same: factories were ranked first at 22.2 percent of all nonagricultural jobs in 1974, by 1984 the average had dropped to 17.6 percent, behind services (26.0 percent) and trade (20.7 percent).

Chart 4. DISTRIBUTION OF NONAGRICULTURAL WAGE AND SALARY EMPLOYMENT BY MAJOR INDUSTRY DIVISION 1974 AND 1984

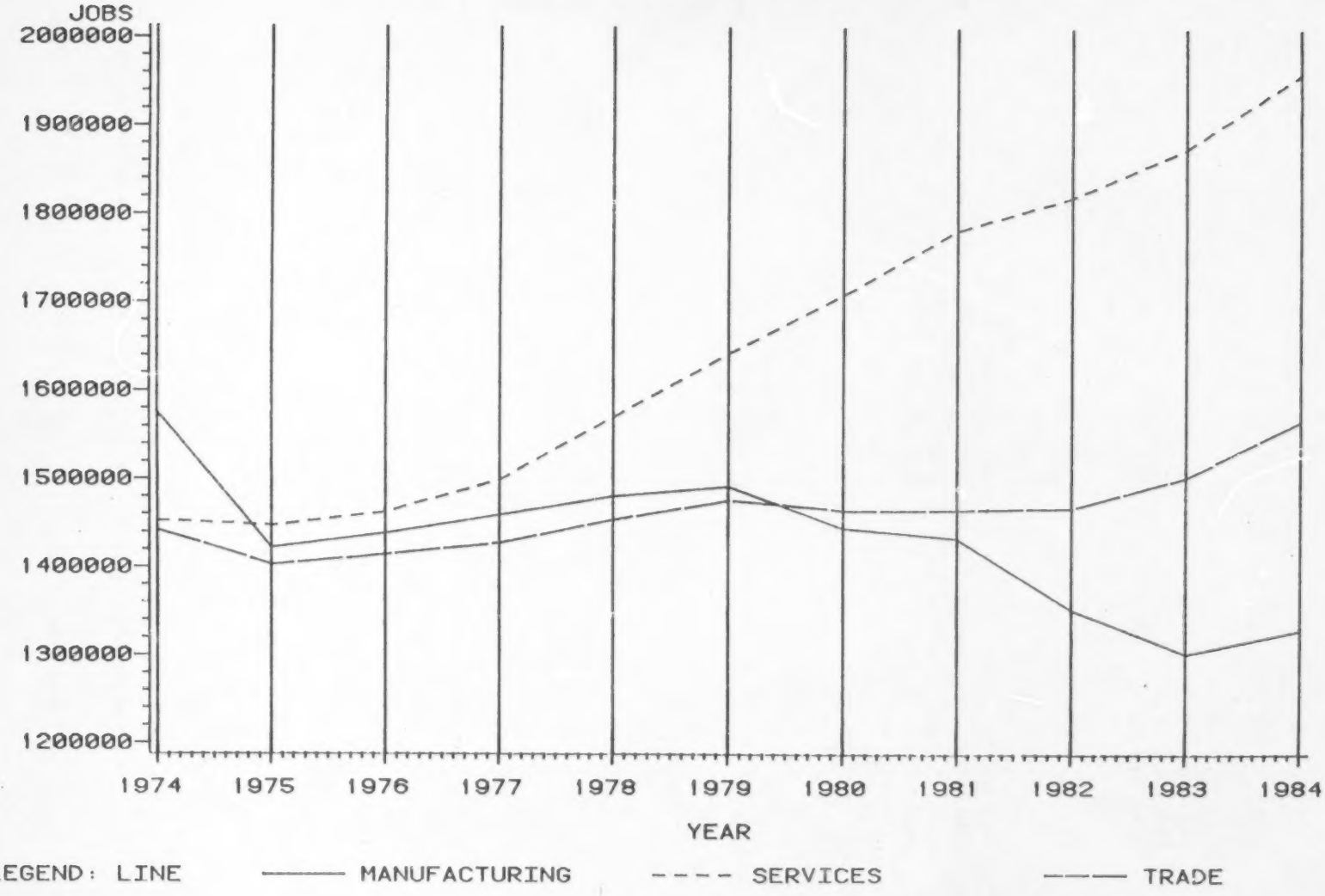


TOTAL NONFARM EMPLOYMENT 7,677,100

TOTAL NONFARM EMPLOYMENT 7,557,000

SOURCE: NEW YORK STATE DEPT. OF LABOR

CHART 5. MANUFACTURING, SERVICES AND TRADE EMPLOYMENT
NEW YORK STATE
1974–1984



Following the recession-influenced setback in 1982, nonfarm jobs in New York State resumed expansion in 1983 and continued upward through 1984. At 7,557,000 in 1984, jobs were up 243,700 over the year and up 479,900 or 6.8 percent from the 1974 level.

Growth was concentrated in nonmanufacturing industries over the decade. Services employment advanced each year (except for 1975) to a record level of 1,962,000 in 1984. Unprecedented needs for health (+136,400) and business services (+129,100) were major factors in the sustained ten-year upturn. Trade picked up by 126,200 since 1974, primarily in the retail segment (+107,600). Layoffs occurred in 1975 and again in 1980 but hiring has been steady since then. Eating and drinking places accounted for the largest portion (+83,500) of retail trade improvements over the decade. In 1980, trade moved ahead of manufacturing to become the state's second largest industry employer, and held that position through 1984.

Since 1976, a whopping 128,200 new workers were hired in the finance, insurance, and real estate industry. Additions by security and commodity brokers (+57,100) and banking (+51,500) caused the lion's share of the ten-year increase. Some additions occurred over the ten years in the number of government jobs (+15,400 or 1.2 percent), but layoffs occurred in 1976, 1977, 1981 and 1982. Federal government showed a steady downward trend over the entire period, losing 21,000 employees. State government expanded by 40,800 and offset both the federal government decline and a smaller local government (-4,600) loss.

The remaining nonmanufacturing industries were cut back from 1974 to 1984. Transportation and public utilities employment was reduced in 7 of the last ten years; all component industries had lower job counts over the decade. Construction employment was off 9,400 from its 1974 total; however, the last four years have seen a recovery of 42,500.

At 1,330,200 in 1984, factory employment was 244,400 behind the 1974 figure. The 10-year drain was divided nearly equally between durable and nondurable goods.

The following table presents nonagricultural wage and salary employment by major industry division from 1974 to 1984.

Table 16. NONAGRICULTURAL WAGE AND SALARY EMPLOYMENT
NEW YORK STATE, 1974-1984

(Annual averages in thousands)

Industry	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984
Total	7,077.1	6,829.9	6,789.5	6,857.6	7,044.5	7,179.4	7,207.1	7,287.3	7,254.6	7,313.3	7,557.0
Manufacturing	1,574.6	1,421.9	1,438.9	1,459.6	1,481.2	1,492.8	1,445.1	1,433.3	1,352.5	1,302.4	1,330.2
Durable	862.1	766.7	774.6	790.1	811.2	831.5	803.0	798.0	750.8	715.9	737.6
Nondurable	712.5	655.1	664.3	669.5	670.0	661.3	642.1	635.3	601.7	586.5	592.6
Nonmanufacturing	5,502.5	5,408.1	5,350.6	5,398.0	5,563.3	5,686.6	5,762.0	5,854.0	5,902.1	6,010.9	6,226.8
Construction	261.2	211.7	189.4	190.2	199.2	210.3	209.3	213.2	219.6	230.8	251.8
Transportation and public utilities	456.8	434.0	428.1	425.3	430.3	433.8	431.4	429.7	422.0	406.7	417.6
Trade	1,441.7	1,402.3	1,414.4	1,427.6	1,454.7	1,476.8	1,465.2	1,465.7	1,468.4	1,503.4	1,567.9
Finance, insurance and real estate	581.7	577.3	575.3	577.8	586.9	605.4	626.2	654.9	670.6	686.7	703.5
Services	1,451.9	1,446.7	1,462.7	1,499.5	1,570.8	1,643.2	1,709.4	1,783.8	1,821.3	1,876.9	1,962.0
Mining	7.4	7.4	7.1	6.9	6.3	5.9	6.1	6.4	6.5	6.7	6.8
Government	1,301.9	1,328.7	1,273.6	1,270.8	1,315.1	1,311.3	1,314.4	1,300.3	1,293.7	1,299.6	1,317.3

NOTE: Detail may not add to total due to rounding.

Major Area Nonagricultural Wage and Salary Employment Trends, 1974-1984

Changes in nonagricultural wage and salary employment totals among the state's major areas since 1974 were mixed. Downstate, the Nassau-Suffolk area picked up almost 229,000 workers over the ten years--almost half of the total statewide increase--and topped the one million mark for the first time during 1984. Except for 1975, annual average nonfarm jobs in Nassau-Suffolk turned upward for 26 straight years. This expansion, along with prominent gains in Westchester and Rockland counties totaling 85,000, more than offset a slackening of 13,700 in New York City.

Owing to changes in area definitions, data for the Albany-Schenectady-Troy and Binghamton areas are not available prior to 1975. Since 1975, almost 51,000 workers were added to payrolls in the Albany-Schenectady-Troy area; most other upstate areas recorded uptrends since 1974 with the largest in the Rochester (+38,700) and Syracuse (+31,900) areas. As in the state, hiring in most nonfactory segments--particularly strong in services and trade--overbalanced long-term layoffs in factories in these areas. Nonfactory increases also occurred in the Buffalo-Niagara Falls and Elmira areas through the period but extensive furloughing in factories pushed the nonfarm jobcount downward by 23,300 and 4,500 in these areas, respectively.

All counties outside metropolitan areas except four--Cortland, Genesee, Steuben and Yates--shared in the state's ten-year job expansion. As a group, nonmetropolitan counties advanced by 41,500 (+8.3 percent) from 1974 to 1984. The largest increases were in Ulster (+9,800), Tompkins (+6,000) and Clinton (+5,700) counties.

Table 17. NONAGRICULTURAL WAGE AND SALARY EMPLOYMENT
NEW YORK STATE AND SELECTED AREAS
1974-1984

(Numbers in thousands)

Area	1974	1984	Change 1974-1984	
			Net	Percent
New York State	7,077.1	7,557.0	479.9	6.8
New York Combined Area (10 county)	4,643.1	4,947.2	304.1	6.5
New York PMSA	3,841.4	3,916.6	75.2	2.0
New York City	3,446.1	3,432.4	-13.7	-0.4
*Putnam County	10.5	14.4	3.9	37.1
Rockland County	72.5	90.7	18.2	25.1
Westchester County	312.3	379.1	66.8	21.4
Nassau-Suffolk PMSA	801.8	1,030.6	228.8	28.5
Upstate Metropolitan Areas				
*Albany-Schenectady-Troy MSA	319.5	370.4	50.9	15.9
*Binghamton MSA	99.5	115.7	16.2	16.3
Buffalo-Niagara Falls CMSA	503.1	479.8	-23.3	-4.6
Elmira MSA	39.2	34.7	-4.5	-11.5
Glens Falls MSA	35.1	41.0	5.9	16.8
Poughkeepsie MSA	87.8	110.5	22.7	25.9
Orange County PMSA	72.9	87.1	14.2	19.5
Rochester MSA	396.3	435.0	38.7	9.8
Syracuse MSA	245.1	277.0	31.9	13.0
Utica-Rome MSA	113.4	116.3	2.9	2.6

* The current series of data for these areas begin in 1975. Data shown for these areas under the 1974 column are for 1975, net and percent changes are based on 1975 data.

Industry Employment Developments: 1983-1984

New York State's economy achieved broad-based improvements in 1984. The Index of Business Activity, compiled by the New York State Commerce Department, averaged 125 (1967 = 100), an increase of five points from 1983. All 13 area business activity indices showed year-to-year advances, with the Poughkeepsie, Nassau-Suffolk, Binghamton, Glens Falls, Syracuse and Utica-Rome areas leading the way.

Reflecting the state's improved business climate, nonfarm job growth occurred for the second year in a row, bringing the total to a record high 7,557,000. All major industry divisions contributed to the advance. In spite of the uptrend of 3.3 percent, the state was unable to keep pace with the U.S. hike of 4.5 percent. All states except Wyoming reported higher jobcounts over the 12 months. Only California (+587,300) and Florida (+302,600) posted larger increments than New York (+243,700) over the year, however. Texas was slightly behind at 243,000.

All major labor areas also marked higher job levels in 1984 but expansions in the New York PMSA (+97,100 or 2.5 percent) and the Nassau-Suffolk PMSA (+51,900 or 5.3 percent) accounted for over 60 percent of the year-to-year statewide uptrend. Among the upstate areas, the largest increases were reported in the Albany-Schenectady-Troy MSA (+16,900 or 4.8 percent); the Rochester MSA (+15,900 or 3.8 percent); and the Buffalo-Niagara Falls CMSA (+14,600 or 3.1 percent). Ulster County, up 2,300 (+4.4 percent), Chautauqua County, up 1,900 (+3.7 percent) and Clinton County, up 1,700 (+6.9 percent) recorded the largest improvements among the nonmetropolitan counties. Only two counties outside metropolitan areas lost jobs from 1983 to 1984. In Fulton County, the count was off by 400 or 2.4 percent, while in Yates County, it was down only 100 or 2.2 percent.

Changes in nonfarm employment in New York State from 1983 to 1984 by major industry group as well as trends in specific component industries and locations are addressed in the following section.

Manufacturing: The index of factory output averaged 112 in 1984, a seven-point (+6.7 percent) hike from 1983. Increased product demand, accompanied by a rise in consumer spending prompted a gain of 27,800 (2.1 percent) in factory jobs from 1983 to an average of 1,330,200 in 1984. This modest increment reflects a turnaround following four straight years of decline, but did little to offset the long-term downward trend in manufacturing employment in New York State. More than three-quarters of the over-the-year increase was attributable to hiring in durable goods. The Nassau-Suffolk PMSA showed the largest upswing in manufacturing jobs (+9,500 or 5.6 percent) among major areas. All other major areas of the state except New York City (-900 or 0.2 percent) shared also in the gain. The 1983-1984 expansion in New York State fell far short of the nearly six percent pick-up recorded for the U.S.

Durable goods employment: An over-the-year improvement of 21,700 (+3.0 percent) brought the state's durable goods jobcount to 737,600 in 1984. Hiring in electrical machinery, transportation equipment, and nonelectrical machinery accounted for nearly 85 percent of the change. These uptrends were partially offset by layoffs in primary metals and instruments. All major areas of the state recorded higher durable goods payrolls in 1984, with the Nassau-Suffolk PMSA accounting for over one-third of the total statewide increase. Nationally, the number of durable goods manufacturing jobs rose by 8.0 percent.

Electrical and electronic equipment: An upturn of 9,000 (+5.9 percent) brought employment in the electrical and electronic equipment manufacturing industry to a level of 161,500, the highest since 1979. Electronic components and accessories provided two-thirds of the growth and, at 49,500 in 1984, this category was up 14.1 percent from 1983 and at a new record high. Strong demand for computer components and new government defense contracts helped boost payrolls in electrical and electronics equipment. Among major areas, the largest hikes occurred in the Nassau-Suffolk, Poughkeepsie and Rochester areas, while small losses were noted in the Albany-Schenectady-Troy and Utica-Rome areas, and Westchester County. Nationwide employment in this industry was up 10.4 percent, with electronic components and accessories contributing nearly half of the added jobs.

Transportation equipment: For the first time since 1978 an increase occurred in the payrosters of transportation equipment manufacturers. Employment rose by 4,800 (+7.6 percent) from 1983 to 67,600 in 1984. Recovery in the domestic automobile industry resulted in a gain of 3,400 in motor vehicles and equipment, while aircraft and parts (+800) and "other" transportation equipment (+500) were also up slightly. The Buffalo, Nassau-Suffolk, and Syracuse areas provided most of the impetus in transportation equipment manufacturing. In the nation, employment increased by 9.8 percent, with nearly two-thirds of the speed-up in motor vehicles and equipment manufacturing.

Machinery, except electrical: A small surge in hiring (+4,500 or 3.0 percent) elevated the job total in nonelectrical machinery to 157,000. Some of this increase was due to recalls at firms which produce parts for the auto industry. Despite the small hike, employment remained considerably below the peak levels of the late 1960's. Metalworking machinery contributed about half (+2,300) of the over-the-year increase in nonelectrical machinery; "other" machinery, except electrical, also showed noteworthy growth (+1,400). Smaller increments were noted in other sub-groups. Engines and turbines manufacturing lost 800 workers from 1983 to 1984, continuing its long-term decline. The Rochester MSA (+1,300) recorded the largest upturn among major areas, with Poughkeepsie and Albany registering the only decreases. In the United States, the number of nonelectrical machinery manufacturing jobs climbed by 8.6 percent.

Fabricated metal products: From a record low of 69,800 in 1983, fabricated metals employment rose to 72,800 in 1984. The boost of 3,000 was the first recovery since 1979, but the total was still the second lowest on record. Metal forgings and stampings and miscellaneous fabricated metal products each gained 700 over the year with smaller upswings in all other components. The Nassau-Suffolk and Buffalo areas piled up the largest increases among the major areas, while the Elmira MSA and New York City posted small losses. The nation's fabricated metal products industry grew by 7.4 percent over the year.

Lumber and wood products: Employment in lumber and wood products manufacturing advanced for the second year in a row, increasing by 800 (+6.9 percent) to 14,000. In comparison, this industry moved ahead 7.9 percent nationally from 1983 to 1984.

Furniture and fixtures: The furniture-producing industry also picked up 800 (+3.9 percent) from year-to-year, following five straight years of decline. Household furniture (+400) and "other" furniture and fixtures (+400) facilitated the improvement. Scattered gains in the Nassau-Suffolk, Buffalo, Rochester and Westchester county areas offset slackening in the Binghamton MSA and Orange County. The nation's furniture industry was on an upswing of 8.4 percent.

Miscellaneous manufacturing industries: For the first time since 1977, limited over-the-year advances occurred in miscellaneous manufacturing industries. Employment inched forward by 1.0 percent (+500) to 51,100. Staffing in costume jewelry and notions (+400) and "other" miscellaneous manufacturing (+300) overcame scattered layoffs (-200) in pens, pencils and office supplies. Recruiting was most significant in the Albany MSA and the Nassau-Suffolk PMSA over the year. In the U.S., miscellaneous manufacturing industries swelled 4.3 percent, attributable primarily to hiring in toys and sporting goods, which climbed 10.5 percent.

Stone, clay and glass products: Stone, clay and glass products employers placed 400 additional workers (+1.3 percent) in jobs over the year. "Other" stone, clay and glass products and miscellaneous nonmetallic mineral products advances overbalanced a drop in glass and glassware. Most major areas of the state marked some job improvement over the year. However, the industry has been adversely affected by the returnable bottle law and competition from plastic containers, causing layoffs in some areas of the state. The Elmira, Orange County, and Buffalo areas registered decreases over the year. Nationwide, this industry broadened by 32,100 or 5.6 percent.

Primary metal industries: Primary metals was one of only two major durable goods manufacturing industries suffering cutbacks from 1983 to 1984. Employment dropped by 1,300 (-3.7 percent) to 34,100. Layoffs in blast furnaces and basic steel products (-2,000), and iron and steel foundries (-700), were tempered by additions in nonferrous rolling and drawing (+900), nonferrous foundries (+400), and "other" primary metals (+100). The Buffalo area was particularly hard hit by plant closings and layoffs in this industry, while much smaller contractions were recorded in New York City and the Nassau-Suffolk PMSA. The nation's primary metal industry was up 4.3 percent over the year.

Instruments and related products: Instruments employment retreated to 126,200 in 1984, down slightly (-600 or 0.5 percent) from 1983. A drop of 2,600 in photographic equipment and supplies, the largest subgroup, counteracted gains in most other components. Layoffs centered in the Rochester area cancelled out increases concentrated in the Nassau-Suffolk area. In the U.S., instruments employment grew by 4.1 percent.

Nondurable goods manufacturing: Employment in nondurable goods manufacturing crept up 1.0 percent (+6,100) to 592,600 in 1984, following five straight years of decline. Changes were mixed among major industry groups, with half adding to payrolls and the rest on the downgrade. Four industries (food and kindred products; apparel and other textile products; petroleum and coal products; and leather and leather products) dipped to all-time lows. The nation's nondurable goods industries advanced 3.0 percent over the year.

Printing and publishing: The printing and publishing industry employed 3,900 (+2.5 percent) additional workers in 1984, bringing employment up to 159,300, the highest annual average since 1973. Periodicals (+1,500) and commercial printing (+1,000) expanded the most, while books (-300) was the only component on the downgrade. New York City and the Nassau-Suffolk PMSA accounted for over 60 percent of the statewide improvement. The percentage increase in the printing and publishing industry nationwide (+5.1 percent) was more than twice as large as the statewide change.

Rubber and miscellaneous plastics products: About 2,200 workers (+7.4 percent) were added to rubber and miscellaneous plastics products payrolls from 1983 to a tally of 31,900 in 1984. Miscellaneous plastics products shot up by 2,000; rubber and rubber products rose only 200. Gains were spread out among most major areas, with only the Glens Falls MSA declining slightly. The nation's rubber industry surged ahead by 10.9 percent.

Textile mill products: Employment in this industry was up 2,000 (+6.7 percent) to 32,000. This was the first upswing in textile mill products jobs in the last eleven years. Knitting mills (+2,300 or 12.4 percent) strengthened to 20,800 and offset small declines in "other" textile mill products and weaving mills. Much of the uptrend reflected a large expansion at a New York City firm. In the U.S., growth of only 1.3 percent occurred in this industry.

Paper and allied products: At 46,300, the job level in paper and allied products was slightly higher (+1,400 or 3.1 percent) than it was in 1983. Miscellaneous converted paper products advanced 1,100 (+5.9 percent), with smaller gains in paper mills (except building paper) and paperboard containers and boxes. "Other" paper and allied products slid 300. Small build-ups in the paper industry were scattered among the major areas. Jobs in the national paper industry kept pace with the percentage increase statewide.

Chemicals and allied products: A small recovery of 900 (+1.4 percent) did little to halt the long-term downward trend in the chemicals industry. At 65,600, employment was more than 25,000 below the peak levels of the late 1960's. Drugs, and the soap-cleaners-toilet goods component were each higher by 500 from 1983 to 1984. Industrial inorganic chemicals and industrial organic chemicals both dropped 300. The remaining components of the chemicals industry were up slightly. Changes were mixed among the major areas, with the largest gain in the Nassau-Suffolk area, and the biggest loss in the Buffalo area. The chemicals industry nationwide inched upward by the same percentage as in the state.

Leather and leather products: The state's leather industry dwindled to a new record low in 1984, as another 1,600 jobs (-6.8 percent) were cut over the year. About 2 out of every 3 jobs have been lost in this industry since the late 1950's. All components contributed to the 12-month contraction: handbags and personal leather goods was down 900, "other" leather and leather products was off 500, and footwear (except rubber) dropped 100. Much of the 1983-1984 change was centered in New York City, where jobs declined by 1,000. The nation's leather industry also ebbed, falling 3.1 percent.

Apparel and other textile products: Curtailment continued in the state's apparel industry, lowering the job count by 1,100 to 145,100. Only men's and boys' suits and coats (+200), men's and boys' furnishings (+300), and miscellaneous fabricated textile products (+200) edged upward over the year. New York City, the state's garment center, lost another 1,800 jobs, and the Nassau-Suffolk PMSA dropped 500. In the U.S., apparel manufacturing employment rose 3.2 percent, with all component industries contributing to the gain.

Food and kindred products: The long-term decline in the food products industry was sustained in 1984, as jobs dropped by 600 (-0.7 percent) to a record low 81,900. The count in 1984 was 50.4 percent of the peak total recorded in 1958. Nominal hiring in preserved fruits and vegetables, grain mill products, and bakery products was insufficient to offset narrowing in meat products (-300), sugar and confectionary products (-200), and "other" food and kindred products (-300) over the year. Sluggishness in New York City and the Poughkeepsie, Rochester, and Buffalo areas was only partially offset by small gains in the Syracuse, Albany, Nassau-Suffolk and Westchester County areas. The nation's food and kindred products employment was up 1.3 percent from 1983 to 1984.

Other nondurable goods manufacturing: The state's petroleum and coal products manufacturing industry was cut back by 600 jobs to a total of 5,600 as employment was curtailed in New York City and the Albany-Schenectady-Troy MSA. Nationally, the petroleum industry contracted by 4.0 percent. Tobacco manufacturing in New York State dipped by 300 jobs (-10.0 percent) to 2,700, with all the loss in New York City, where this small industry is concentrated. In the U.S., employment was down 2.5 percent.

Nonmanufacturing: The volume of nonfactory jobs rose for the eighth consecutive year, reaching 6,226,800 in 1984, a new annual average high. The gain of 3.6 percent (+215,900 jobs) was slightly below the national increase of 4.1 percent. All major nonmanufacturing sectors in the state contributed to the overall upswing. Services and trade posted the largest advances over the year, contributing about 7 out of 10 new nonfactory jobs. Trade, services and finance-insurance-real estate reached record high employment averages in 1984. Every labor area in the state except Schuyler and Yates counties added workers in nonmanufacturing between 1983 and 1984.

Services and miscellaneous: Still the state's largest employer, this sector picked up another 85,100 (+4.5 percent) to reach a record employment level of 1,962,000 in 1984, or more than one-quarter of all nonfarm jobs. The service activity index climbed to an average level of 157, a five-point advance for the year. Business services continued its steady growth (+32,300 or 8.4 percent), and accounted for better than one out of every three new service industry jobs. Other industries with strong uptrends included health services (+15,200 with most of the gain outside of hospitals); social services (+10,100); and "other" services (+8,600). All major areas of the state shared in the higher job levels in the services industries. In the U.S., the percentage improvement (+5.1 percent) was slightly better than in the state.

Trade: Employment in trade swelled to 1,567,900 in 1984, a widening of 64,500 or 4.3 percent from 1983. Wholesale trade moved up 13,700, and the wholesale trade index jumped nine points over the year to an average of 123. Retail trade employment soared by 50,700. Strong consumer spending activity for the second consecutive year contributed to the opening of new shopping malls, expansion of existing shopping facilities and the proliferation of eating and drinking places (especially fast food). The retail trade index posted an eight-point advance to 105, and retail sales climbed to $90.8 billion in 1984, up 11.3 percent from 1983. All industry components of retail trade exceeded the previous year's level. All major areas beefed up staffs in trade outlets, but the Nassau-Suffolk PMSA (+17,200), New York City (+16,700) and the Albany MSA (+6,200) piled up the most new jobs. Trade is the largest industry in the U.S. and was up 4.7 percent since 1983. The bulk of the new jobs were in retail trade, but wholesale trade showed a slightly greater percentage increase (+5.1 percent).

Construction: After slumping severely during the mid-to-late 1970's, the construction industry rallied for the fourth straight year. The vigorous 1983-1984 upturn of 21,000 was unprecedented in the current series of data (1958-1984). At a level of 251,800 (the highest in ten years), construction employment was 31,200 below the all-time peak of 283,000 achieved in 1973. The value of construction contracts awarded in New York State in 1984 totaled $9.2 billion, up eight percent from 1983; the residential building category led the way with a 16 percent advance. Nonbuilding contracts moved up nine percent, while the nonresidential segment grew only three percent. Upstate, an 18 percent jump in dollar volume outperformed the downstate area's three percent rise. According to data from the New York State Division of Housing and Community Renewal, new housing units authorized by building permits in 1984 totaled 40,671, a five percent increase from 1983. Over the year, special trade contractors added 13,800 jobs, while general building contractors recovered 6,700 jobs. Heavy construction contractors inched up by 500. All major areas of the state had higher job counts, and the nation's construction employment grew by 9.5 percent.

Government: Government agencies added 17,700 new workers (+1.4 percent) since 1983 to bring the average up to 1,317,300, the highest level since 1975. Local government (+13,200) provided most of the increase, with local education (+6,500) and local noneducation (+6,700) contributing nearly equal amounts. State government expanded by 3,200 (+1.3 percent) and federal government jobs were up 1,200, primarily due to increased postal service hiring (+800). In New York City, government employment swelled by 12,400, due mainly to hiring in local government. The Albany-Schenectady-Troy (+1,600), and Nassau-Suffolk (+1,500) areas also showed substantial gains. Nationally, government employment edged up 0.7 percent, with local government accounting for 37.6 percent of the added jobs, state government for 35.9 percent, and federal government, 26.5 percent.

Finance, insurance and real estate: This steadily growing industry accrued another 16,800 jobs in 1984, taking average employment to a new record of 703,500. Security and commodity brokers and allied services grew by 9.0 percent (+10,700), and were the major impetus in the year-to-year upswing. All other components except insurance carriers (-1,400) picked up new employees over the year. Most major areas of the state recorded higher job levels in this industry, especially those in the downstate area (+11,700). In 1984, New York State accounted for over 12 percent of all finance, insurance and real estate jobs in the nation. In the U.S., finance, insurance and real estate expanded 3.6 percent, with security and commodity brokers, and allied services soaring by 35.9 percent.

Transportation, communications and public utilities: This industry picked up for the first time since 1979 and reached an average employment of 417,600 in 1984, 10,900 above 1983 but still 83,000 below the peak attained in 1970. Much of the year-to-year gain was a result of a return to normal after major 1983 strikes in communications and public utilities. "Other" transportation picked up by 3,100 over the year and smaller increases were noted in air transportation (+1,400); local and interurban passenger transit (+1,000); and railroad transportation (+300). Most major areas of the state saw increments in transportation, communications and public utilities, and the nation had a growth rate of 4.3 percent.

Table 18. NONAGRICULTURAL WAGE AND SALARY EMPLOYMENT
NEW YORK STATE, BY INDUSTRY
1983 AND 1984

(Annual averages in thousands)

Industry	1983	1984	Change 1983-1984	
			Net	Percent
Total nonagricultural employment	7,313.3	7,557.0	243.7	3.3
Manufacturing	1,302.4	1,330.2	27.8	2.1
Durable goods	715.9	737.6	21.7	3.0
Lumber and wood products	13.3	14.1	0.8	6.0
Furniture and fixtures	20.3	21.1	0.8	3.9
Household furniture	8.0	8.4	0.4	5.0
Partitions and fixtures	6.0	6.1	0.1	1.7
Other furniture and fixtures	6.3	6.7	0.4	6.3
Stone, clay and glass products	31.8	32.2	0.4	1.3
Glass and glassware	8.8	8.2	-0.6	-6.8
Miscellaneous nonmetallic mineral products	9.5	9.7	0.2	2.1
Other stone, clay and glass products	13.5	14.3	0.8	5.9
Primary metal industries	35.4	34.1	-1.3	-3.7
Blast furnace and basic steel products	10.0	8.0	-2.0	-20.0
Iron and steel foundries	3.6	2.9	-0.7	-19.4
Nonferrous rolling and drawing	11.7	12.6	0.9	7.7
Nonferrous foundries	4.6	5.0	0.4	8.7
Other primary metals	5.5	5.6	0.1	1.8
Fabricated metal products	69.8	72.8	3.0	4.3
Cutlery, hand tools and hardware	8.8	9.0	0.2	2.3
Fabricated structural metal products	20.9	21.1	0.2	1.0
Screw machine products	5.4	5.9	0.5	9.3
Metal forgings and stampings	12.1	12.8	0.7	5.8
Miscellaneous fabricated metal products	8.9	9.6	0.7	7.9
Other fabricated metal products	13.7	14.3	0.6	4.4
Machinery, except electrical	152.5	157.0	4.5	3.0
Engines and turbines	13.7	12.9	-0.8	-5.8
Construction and related machinery	4.3	4.5	0.2	4.7
Metalworking machinery	17.1	19.4	2.3	13.5
Special industry machinery	11.2	11.3	0.1	0.9
General industrial machinery	20.5	20.9	0.4	2.0
Office and computing machines	58.2	58.4	0.2	0.3
Refrigeration and service industry machinery	10.2	10.8	0.6	5.9
Other machinery, except electrical	17.3	18.7	1.4	8.1

Table 18. (continued)

Industry	1983	1984	Change 1983-1984	
			Net	Percent
Electrical and electronic equipment	152.5	161.5	9.0	5.9
Electrical industrial apparatus	16.4	16.5	0.1	0.6
Household appliances	3.8	4.1	0.3	7.9
Electric lighting and wiring equipment	22.0	23.4	1.4	6.4
Radio and TV receiving equipment	5.4	4.7	-0.7	-13.0
Communication equipment	49.5	51.3	1.8	3.6
Electronic components and accessories	43.4	49.5	6.1	14.1
Other electrical equipment and supplies	12.1	11.9	-0.2	-1.7
Transportation equipment	62.8	67.6	4.8	7.6
Motor vehicles and equipment	28.5	31.9	3.4	11.9
Aircraft and parts	28.7	29.5	0.8	2.8
Other transportation equipment	5.7	6.2	0.5	8.8
Instruments and related products	126.8	126.2	-0.6	-0.5
Engineering and scientific instruments	11.7	12.3	0.6	5.1
Measuring and controlling devices	13.2	13.6	0.4	3.0
Medical instruments and supplies	13.4	13.8	0.4	3.0
Ophthalmic goods	7.5	8.0	0.5	6.7
Photographic equipment and supplies	76.2	73.6	-2.6	-3.4
Other instruments and related products	4.9	4.9	-	-
Miscellaneous manufacturing industries	50.6	51.1	0.5	1.0
Jewelry and silverware	14.7	14.8	0.1	0.7
Toys and sporting goods	11.7	11.7	-	-
Pens, pencils and office supplies	3.2	3.0	-0.2	-6.2
Costume jewelry and notions	5.8	6.2	0.4	6.9
Other miscellaneous manufacturing industries	15.1	15.4	0.3	2.0
Nondurable goods	586.5	592.6	6.1	1.0
Food and kindred products	82.5	81.9	-0.6	-0.7
Meat products	6.9	6.6	-0.3	-4.3
Preserved fruits and vegetables	9.9	10.0	0.1	1.0
Grain mill products	5.5	5.6	0.1	1.8
Bakery products	16.7	16.8	0.1	0.6
Sugar and confectionary products	6.4	6.2	-0.2	-3.1
Beverages	15.3	15.3	-	-
Other food and kindred products	21.8	21.5	-0.3	-1.4
Tobacco manufactures	3.0	2.7	-0.3	-10.0

Table 18. (continued)

Industry	1983	1984	Change 1983-1984	
			Net	Percent
Textile mill products	30.0	32.0	2.0	6.7
Weaving mills, cotton, synthetics, and wool	3.2	3.1	-0.1	-3.1
Knitting mills	18.5	20.8	2.3	12.4
Textile finishing, except wool	2.1	2.2	0.1	4.8
Other textile mill products	6.1	5.9	-0.2	-3.3
Apparel and other textile products	146.2	145.1	-1.1	-0.8
Men's and boy's suits and coats	8.0	8.2	0.2	2.5
Men's and boy's furnishings	13.4	13.7	0.3	2.2
Women's and misses' outerwear	73.8	72.8	-1.0	-1.4
Women's and children's undergarments	8.4	8.3	-0.1	-1.2
Miscellaneous apparel and accessories	9.6	9.1	-0.5	-5.2
Miscellaneous fabricated textile products	20.8	21.0	0.2	1.0
Other apparel and textile products	12.2	12.0	-0.2	-1.6
Paper and allied products	44.9	46.3	1.4	3.1
Paper mills, except building paper	10.2	10.4	0.2	2.0
Miscellaneous converted paper products	18.6	19.7	1.1	5.9
Paperboard containers and boxes	13.5	13.8	0.3	2.2
Other paper and allied products	2.7	2.4	-0.3	-11.1
Printing and publishing	155.4	159.3	3.9	2.5
Newspapers	33.7	34.3	0.6	1.8
Periodicals	29.0	30.5	1.5	5.2
Books	22.9	22.6	-0.3	-1.3
Commercial printing	38.9	39.9	1.0	2.6
Blankbooks and bookbinding	8.2	8.6	0.4	4.9
Printing trade services	8.3	8.5	0.2	2.4
Other printing and publishing	14.5	15.0	0.5	3.4
Chemicals and allied products	64.7	65.6	0.9	1.4
Industrial inorganic chemicals	6.8	6.5	-0.3	4.4
Plastics materials and synthetics	4.7	4.9	0.2	4.3
Drugs	21.4	21.9	0.5	2.3
Soap, cleaners and toilet goods	18.5	19.0	0.5	2.7
Industrial organic chemicals	7.1	6.8	-0.3	-4.2
Other chemicals and allied goods	6.2	6.3	0.1	1.6
Petroleum and coal products	6.2	5.6	-0.6	-9.7
Rubber and miscellaneous plastics products	29.7	31.9	2.2	7.4
Rubber and rubber products	3.3	3.5	0.2	6.1
Miscellaneous plastics products	26.4	28.4	2.0	7.6
Leather and leather products	23.7	22.1	-1.6	-6.8
Footwear, except rubber	7.7	7.6	-0.1	-1.3
Handbags and personal leather goods	8.6	7.7	-0.9	-10.5
Other leather and leather products	7.4	6.9	-0.5	-6.8

Table 18. (continued)

Industry	1983	1984	Change 1983-1984	
			Net	Percent
Nonmanufacturing	6,010.9	6,226.8	215.9	3.6
Mining	6.7	6.8	0.1	1.5
Construction	230.8	251.8	21.0	9.1
General building contractors	44.8	51.5	6.7	15.0
Heavy construction contractors	32.1	32.6	0.5	1.6
Special trade contractors	153.9	167.7	13.8	9.0
Transportation and public utilities	406.7	417.6	10.9	2.7
Railroad transportation	11.9	12.2	0.3	2.5
Local and interurban passenger transit	40.4	41.4	1.0	2.5
Air transportation	51.3	52.7	1.4	2.7
Other transportation	115.0	118.1	3.1	2.7
Communication	132.4	135.5	3.1	2.3
Telephone and telegraph communication	93.7	94.4	0.7	0.7
Electric, gas and sanitary services	55.7	57.6	1.9	3.4
Wholesale and retail trade	1,503.4	1,567.9	64.5	4.3
Wholesale trade	451.2	464.9	13.7	3.0
Retail trade	1,052.2	1,102.9	50.7	4.8
Building materials and garden supplies	31.0	34.0	3.0	9.7
General merchandise stores	153.5	159.9	6.4	4.2
Department stores	131.4	136.6	5.2	4.0
Food stores	195.4	201.3	5.9	3.0
Automotive dealers and service stations	81.0	87.8	6.8	8.4
Apparel and accessory stores	85.7	89.6	3.9	4.6
Furniture and home furnishings	42.8	46.3	3.5	8.2
Eating and drinking places	313.9	328.3	14.4	4.6
Miscellaneous retail	148.9	155.7	6.8	4.6
Finance, insurance and real estate	686.7	703.5	16.8	2.4
Banking	240.0	241.1	1.1	0.5
Security, commodity brokers and services	118.7	129.4	10.7	9.0
Insurance carriers	116.1	114.7	-1.4	-1.2
Insurance agents, brokers, and services	51.7	52.7	1.0	1.9
Real estate and combination offices	118.5	122.1	3.6	3.0
Credit agencies, except banks; and holding and other investment companies	41.8	43.4	1.6	3.8

Table 18. (continued)

Industry	1983	1984	Change 1983-1984	
			Net	Percent
Services and miscellaneous	1,876.9	1,962.0	85.1	4.5
Hotels and other lodging places	66.5	70.3	3.8	5.7
Hotels, motels and tourist courts	61.6	65.2	3.6	5.8
Rooming houses and trailer parks	4.9	5.1	0.2	4.1
Business services	385.9	418.2	32.3	8.4
Amusement and recreation services	68.4	68.2	-0.2	-0.3
Health services	493.5	508.7	15.2	3.1
Hospitals	271.0	273.2	2.2	0.8
Health services, except hospitals	222.5	235.5	13.0	5.8
Legal services	77.1	82.2	5.1	6.6
Educational services	183.2	189.3	6.1	3.3
Social services	167.1	177.2	10.1	6.0
Membership organizations	114.9	115.0	0.1	0.1
Miscellaneous services	104.3	108.2	3.9	3.7
Other services	216.0	224.6	8.6	4.0
Government	1,299.6	1,317.3	17.7	1.4
Federal	151.4	152.6	1.2	0.8
U.S. Postal Service	70.4	71.2	0.8	1.1
Department of Defense	22.2	22.4	0.2	0.9
Other federal government	58.8	59.0	0.2	0.3
State	255.1	258.3	3.2	1.3
Education	45.8	46.7	0.9	2.0
Other state government	209.3	211.6	2.3	1.1
Local	893.1	906.3	13.2	1.5
Education	414.2	420.7	6.5	1.6
Other local government	478.9	485.6	6.7	1.4

Outlook

The New York State Labor Department, in conjunction with Data Resources Inc.*, has projected an increase of over 300,000 new nonagricultural wage and salary jobs for the state through 1986. Although the pace will slow, manufacturing employment is expected to continue on its long-term downward trend. Losses totaling about 13,000 in the nondurable goods sector over the two years will more than offset a nominal addition in the durable goods category.

Nonfactory employers will remain in the spotlight through 1986. As might be expected, forecasts call for gains in a broad array of service industries (projected to grow by over 175,000), followed by increments in trade (+60,000), government (+36,000), the finance, insurance and real estate category (+30,000) and construction (+27,000).

The largest advances in the services industries are expected in business services, followed by health, educational, social and "other" services. Although staffs in most trade industries will be expanded, eating and drinking places, miscellaneous retail stores and wholesale trade will provide the most extensive opportunities. Over half of the upturn in the finance, insurance and real estate component will be concentrated in the security and commodity brokers and allied services segment.

The latest available national projections indicate that 85 percent of the new job growth between 1982 and 1995 will take place in nonmanufacturing. Among services, industries such as medical care, business services, professional services, hotels, personal services and nonprofit organizations are projected to account for more than 1 of 3 new jobs over the projection span, compared with 1 of 6 for manufacturing industries.

Factory jobs, which represented 25 percent of all jobs in 1959 but less than 19 percent in 1982, are projected to maintain this steady share through the 1982-1995 period. Table 19 shows projected national job growth by major industry division for the period 1982-1995.

* Key forecast assumptions for the U.S. for the model used in the projections (CONTROL) and risks to the forecast are explained in detail in Review of the U.S. Economy, June 1985, published by Data Resources Incorporated.

Table 19. PROJECTED JOB GROWTH BY MAJOR INDUSTRY DIVISION
UNITED STATES, 1982-1995

(In thousands)

Industry	1982-1995		1982-1990		1990-1995	
	New jobs	Percent of total	New jobs	Percent of total	New jobs	Percent of total
Total new jobs	25,248	100.0	16,000	100.0	9,248	100.0
Goods-producing:	6,548	25.9	4,350	27.2	2,198	23.8
Farm	-265	-1.0	-163	-1.0	-102	-1.1
Mining	122	0.5	39	0.2	83	0.9
Construction	2,434	9.6	1,472	9.2	962	10.4
Manufacturing	4,257	16.9	3,002	18.8	1,255	13.6
Durable	3,170	12.6	2,224	13.9	946	10.2
Nondurable	1,087	4.3	778	4.9	309	3.3
Service-producing:	18,700	74.1	11,650	72.8	7,050	76.2
Transportation and public utilities	1,094	4.3	659	4.1	435	4.1
Trade	6,009	23.8	3,819	23.9	2,190	23.7
Finance, insurance and real estate	1,786	7.1	1,214	7.6	572	6.2
Services	8,673	34.4	5,246	32.8	3,427	37.1
Private households	-289	-1.1	-235	-1.5	-54	-0.6
Government	1,427	5.7	947	5.9	480	5.2

SOURCE: U.S. Department of Labor, Bureau of Labor Statistics, Monthly Labor Review, November 1983.

Growth and Declining Industries

Even though employment in the state soared to new record levels and unemployment retreated to its lowest point in years during 1984, the long-term need for economic development in the state is unchanged. Continued budget restraint at all levels of government, reduced funds for training, and persistent layoffs in some industries are only a few of the factors inducing administrators and planners to coordinate their efforts in expanding opportunities for the unemployed, attracting new business to the state, and developing training in occupations and industries with substantial demand for workers.

To assist those concerned with economic and job development efforts, this section of the report will identify separately the specific industries recording the most significant expansions (growth industries) and the largest contractions (declining industries) over the last 10 years (1974-1984). Their general hiring performance during slack periods in the U.S. economy will also be discussed.

Growth Industries

Service-producing industries--particularly those in the wholesale and retail trade, finance, insurance and real estate and services (including personal and business services) categories--have been a major source of employment growth at both the state and national levels for many years. The bulk of the jobs lost during recent recessionary periods were in the goods-producing (mostly manufacturing) segment and even though some factory components bounced back to normal levels after the slowdowns, most of the jobs gained were in nonmanufacturing.

The current statewide list of expanding industries (Table 20) is not substantially different from those compiled in the last several years. All 16 industries are in the nonfactory component, evidence of the continuing strength of this sector of the economy. As a group, these categories added 834,000 workers over the last 10 years; almost 500,000 or 60 percent of the advance was recorded since 1979. These components comprised about 39 percent of all nonfarm jobs in 1974; by 1984 their share had climbed to almost 48 percent.

Table 20. NONAGRICULTURAL INDUSTRIES REGISTERING THE LARGEST EMPLOYMENT INCREASES 1974-1984 AND 1979-1984

(Annual averages, numbers in thousands)

Industry	Increases in annual average employment			
	1974-1984		1979-1984	
	Net	Percent	Net	Percent
Health services	136.4	36.6	88.0	20.9
Hospitals	42.1	18.2	27.1	11.0
Health services, except hospitals	94.3	66.8	60.9	34.9
Business services	129.1	44.7	67.1	19.1
Social services*	84.4	90.9	52.6	42.2
Eating and drinking places	83.5	34.1	33.3	11.3
Security and commodity brokers	57.1	79.0	49.8	62.6
Banking	51.5	27.2	34.3	16.6
Educational services	51.5	37.4	29.9	18.8
Other services (personal services, auto repair and garages, miscellaneous repair services, motion pictures)	41.5	22.7	29.7	15.2
State government	40.8	18.8	12.3	5.0
Miscellaneous services (engineering, architectural, surveying services, noncommercial organizations, etc.)	32.8	43.5	17.2	18.9
Legal services	32.3	64.7	20.3	32.8
Food stores	26.6	15.2	20.3	11.2
Miscellaneous retail stores	24.9	19.0	18.8	13.7
Wholesale trade	18.5	4.1	15.5	3.4
Amusement and recreational services	11.9	21.1	3.9	6.1
Insurance agents and brokers	11.2	27.0	5.2	10.9

* This industry experienced a large increase in employment not attributable to growth between 1980 and 1982. This increase was due to a reclassification of a large number of workers from the "domestic" category to social services.

Growth industries exceeded their 1974 level by slightly over 30 percent in 1984, compared with a ten-year drop of 8 percent in all other categories (see Chart 6). Major impetus was received from expanding industries in the services component--health, business, educational, social, legal and "other" services (up more than a half million jobs or 41.4 percent as a group)--trade outlets (up 153,500 or 15.4 percent) and the finance, insurance and real estate component (up 119,800 or 39.5 percent). Most of the increment of 40,800 (+18.8 percent) in state government was in noneducational institutions.

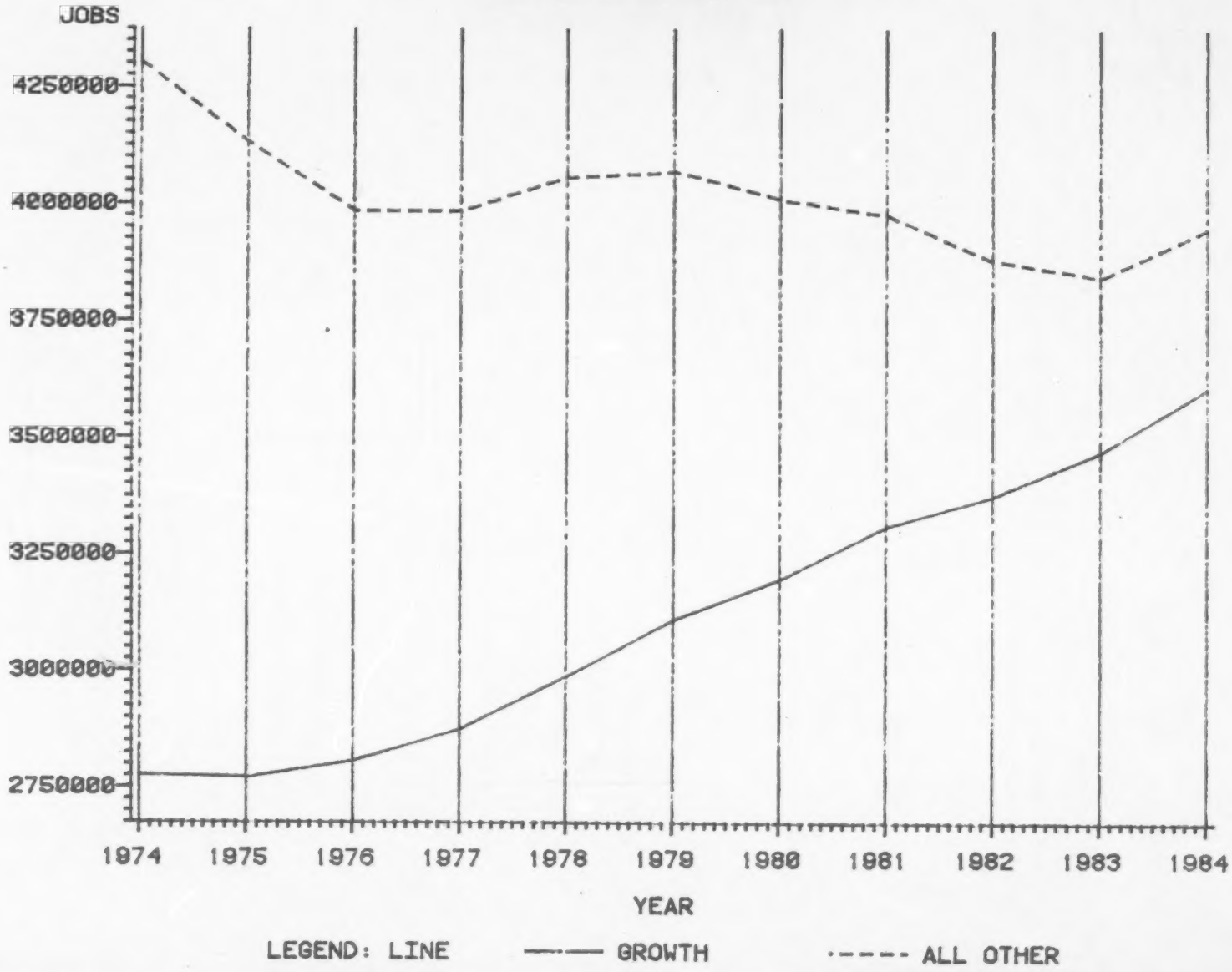
The nation underwent three recessionary periods during the last 10 years--November, 1973 to March, 1975; January to July, 1980; and July, 1981 to November, 1982. In terms of employment, the 1973-1975 downturn had the most pronounced effect on New York State. With setbacks in most industries, statewide total nonagricultural employment slid by almost 343,000 from 1973 through 1976. Some of the growth industries lost ground during that period but reductions were not as severe or as long-lasting as in other categories. Notable exceptions to the downtrend were eating and drinking places and the health and educational services categories which continued to add workers through the period.

The short-lived 1980 recession and longer 1981-1982 slowdown failed to curb strong hiring patterns in growth industries--in fact, most of the categories added workers every year from 1979 through 1984. Both wholesale and retail food sales and several other wholesale trade components, temporarily lost ground during 1980 but were back to normal by 1981. Wholesale trade, business services and amusement and recreation services were the only "growth industry" employment losers between 1981 and 1982. All categories except amusement services had recovered by 1983.

Additional industries which did not record substantial increments from 1974 to 1984 but showed better performance since 1979 included: building contractors (+8,800); special trade contractors (+33,500); printing and publishing (+4,500); communications (+6,500); retail building materials stores (+5,100); credit agencies and investment companies (+5,800); real estate and combinations (+8,100); and hotels and other lodging places (+10,100).

These "growth industries" are not exhaustive, but reflect only those categories recording the most significant advances in jobs over the last five- and ten-year periods. Some of the industries which registered considerable growth over the last ten years are not expected to continue hiring at pre-1984 levels. For example, most of the future hiring in state government will result from replacement needs; total jobs are expected to hold close to current levels as budgetary belt-tightening continues.

CHART 6. EMPLOYMENT IN GROWTH INDUSTRIES
AND ALL OTHER NONFARM INDUSTRIES
NEW YORK STATE, 1974–1984



Declining Industries

As in the case of the expanding industries, the current statewide list of declining industries is about the same as those compiled in previous years. Of the 17 industries shown on the list (Table 21), eleven are classified in manufacturing. They accounted for almost 70 percent of the overall downturn since 1974 in the 17 declining industries. Net 10-year losses of 232,000 in the factory component of the declining industry list were nearly equally divided between durable and nondurable goods firms. General merchandise stores, federal government, membership orgarizations, transportation and insurance effectuated a retreat of another 109,000.

Table 21. NONAGRICULTURAL INDUSTRIES REGISTERING THE LARGEST EMPLOYMENT DECREASES 1974-1984 AND 1979-1984

(Annual averages, numbers in thousands)

Industry	Decreases in annual average employment			
	1974-1984		1979-1984	
	Net	Percent	Net	Percent
Apparel and other textile products*	53.4	26.9	32.6	18.3
Primary metals*	35.6	51.1	24.6	41.9
General merchandise stores	31.1	16.3	12.0	7.0
Miscellaneous manufacturing*	22.7	30.8	12.8	20.0
Federal government	21.0	12.1	8.4	5.2
Textile mill products*	20.9	39.5	5.5	14.7
Food and kindred products*	19.9	19.5	11.8	12.6
Other transportation (bus, taxi, motor freight, water)	18.9	13.8	12.6	9.6
Fabricated metal products*	15.9	17.9	12.2	14.4
Membership organizations	15.5	11.9	0.2	0.2
Transportation equipment*	15.2	18.4	13.2	16.3
Machinery, except electrical*	14.5	8.5	16.6	9.6
Railroad transportation	12.8	51.2	9.4	43.5
Stone, clay and glass products*	11.7	26.7	8.1	20.1
Leather and leather products*	11.0	33.2	7.2	24.6
Chemicals and allied products*	10.8	14.1	7.8	10.6
Insurance carriers	9.9	7.9	5.1	4.3

* Manufacturing industries.

Most of the categories on the declining industry list were at record low employment levels in 1983. While some recorded upturns from 1983 to 1984, primary metals, apparel, food products, leather manufacturing and insurance carriers continued downward to new all-time lows in 1984.

The declining industry list shows only those with the largest downturns over the last 5- and 10-year periods. Other industries reporting substantial job reductions between 1979 and 1984 included lumber (-1,400), furniture (-2,600), electrical machinery (-1,400), instruments (-1,000), paper (-5,900) and rubber and plastics (-900)--all in manufacturing--and construction-general contracting (-800) and air transportation (-3,900).

Earnings and Hours

Average weekly earnings of production workers in the state's factories advanced to $366.96 in 1984, a new all-time high and $19.55 above the 1983 average. (See Tables 22 and 23.) The upturn of 5.6 percent from year to year outpaced the 4.3 percent rate of inflation, as measured by the change in the Consumer Price Index (CPI) for All Urban Consumers (U.S. City Average). The CPI for Urban Wage Earners and Clerical Workers climbed a more modest 3.4 percent through the period. The change in factory earnings at the U.S. level was about the same (+5.4 percent) as in the state.

Weekly earnings in durable goods industries moved ahead by 5.4 percent from 1983 to 1984, the same as for the nation. All major industries within the durable goods segment in the state recorded advances from year-to-year, ranging from an increment of 2.5 percent in the miscellaneous manufacturing category to 10.4 percent in transportation equipment. The latter was spurred by a $58.10 per week growth in paychecks of motor vehicle workers. A substantial slump of $46.34 (-10.0 percent) in iron and steel foundries held the primary metals uptrend to only 2.7 percent. Layoffs of highly paid workers in the troubled steel industry--some forced by plant closings--effectuated the downturn.

The pick-up in average weekly earnings in the nondurables category since 1983 matched the 5.6 percent change for all manufacturing industries. Paper and allied products led the way (+7.6 percent), with the smallest augmentation in leather and leather products (+2.4 percent). Earnings in the U.S. for soft goods workers widened by 4.1 percent over the year.

The construction (+7.5 percent), telephone and telegraph (+8.7 percent), electric, gas, and sanitary service (+7.7 percent) categories recorded the largest improvements in average weekly earnings in the nonfactory component. The average for the hotels, motels and tourist court subgroup retrenched by 3.3 percent.

Average hourly earnings in the state's manufacturing industries rose from $8.84 in 1983 to $9.22 in 1984, also a new record level. This change (+4.3 percent) was only slightly bigger than the advance of 34 cents (+3.9 percent) recorded for the U.S. average.

Table 22. EARNINGS AND HOURS OF PRODUCTION WORKERS IN MANUFACTURING ESTABLISHMENTS
NEW YORK STATE, 1960-1984

Year	Average weekly earnings			Average weekly hours			Average hourly earnings		
	Manufac-turing	Durable goods	Nondurable goods	Manufac-turing	Durable goods	Nondurable goods	Manufac-turing	Durable goods	Nondurable goods
1960	$ 89.61	$100.70	$ 81.95	38.8	40.5	37.7	$2.31	$ 2.49	$2.18
1961	92.21	103.78	84.39	38.8	40.4	37.7	2.38	2.57	2.24
1962	96.02	108.51	87.26	39.3	41.0	38.2	2.44	2.65	2.29
1963	98.78	111.79	89.07	39.2	41.1	37.9	2.52	2.72	2.35
1964	102.44	115.51	92.48	39.4	41.4	37.9	2.60	2.79	2.44
1965	106.40	120.67	95.63	39.7	41.9	38.1	2.68	2.88	2.51
1966	111.35	125.63	99.72	40.2	42.3	38.5	2.77	2.97	2.59
1967	114.44	126.79	104.67	39.6	41.3	38.2	2.89	3.07	2.74
1968	121.48	134.55	111.36	39.7	41.4	38.4	3.06	3.25	2.90
1969	128.30	141.66	117.66	39.6	41.3	38.2	3.24	3.43	3.08
1970	134.59	147.83	124.79	38.9	40.5	37.7	3.46	3.65	3.31
1971	145.84	159.98	134.17	39.1	40.5	37.9	3.73	3.95	3.54
1972	157.61	173.87	144.01	39.6	41.3	38.2	3.98	4.21	3.77
1973	167.58	186.85	151.29	39.9	41.8	38.3	4.20	4.47	3.95
1974	178.48	197.69	161.03	39.4	41.1	37.8	4.53	4.81	4.26
1975	191.00	210.37	173.80	38.9	40.3	37.7	4.91	5.22	4.61
1976	207.64	232.88	185.82	39.4	41.0	38.0	5.27	5.68	4.89
1977	224.53	255.02	197.22	39.6	41.4	38.0	5.67	6.16	5.19
1978	241.98	275.56	210.10	39.8	41.5	38.2	6.08	6.64	5.50
1979	260.17	297.67	224.96	39.6	41.4	38.0	6.57	7.19	5.92
1980	282.89	321.44	244.57	39.4	41.0	37.8	7.18	7.84	6.47
1981	308.90	352.51	264.86	39.4	40.8	38.0	7.84	8.64	6.97
1982	323.98	368.52	280.88	38.8	40.1	37.5	8.35	9.19	7.49
1983	347.41	394.79	303.24	39.3	40.7	38.0	8.84	9.70	7.98
1984	366.96	416.25	320.12	39.8	41.5	38.2	9.22	10.03	8.38

Table 23. AVERAGE EARNINGS AND HOURS IN NONAGRICULTURAL ESTABLISHMENTS
NEW YORK STATE, 1983-1984

Industry	Production or nonsupervisory worker averages							
	Weekly earnings			Hourly earnings			Weekly hours	
	1983	1984	Percent change	1983	1984	Percent change	1983	1984
Manufacturing	$347.41	$366.96	5.6	$ 8.84	$ 9.22	4.3	39.3	39.8
Durable goods	394.79	416.25	5.4	9.70	10.03	3.4	40.7	41.5
Lumber and wood products	256.63	281.87	9.8	6.53	7.10	8.7	39.3	39.7
Furniture and fixtures	274.33	281.60	2.7	6.91	7.04	1.9	39.7	40.0
Household furniture	284.70	292.99	2.9	7.30	7.38	1.1	39.0	39.7
Partitions and fixtures	286.53	290.50	1.4	7.11	7.12	0.1	40.3	40.8
Stone, clay and glass products	404.33	427.61	5.8	9.79	10.23	4.5	41.3	41.8
Glass and glassware	410.52	435.55	6.1	9.94	10.47	5.3	41.3	41.6
Primary metal industries	470.55	483.30	2.7	11.59	11.59	0.0	40.6	41.7
Blast furnace and basic steel products	530.88	545.79	2.8	13.44	13.12	-2.4	39.5	41.6
Iron and steel products	463.32	416.98	-10.0	11.44	10.22	-10.7	40.5	40.8
Nonferrous foundries	462.26	494.68	7.0	11.22	11.75	4.7	41.2	42.1
Fabricated metal products	355.85	373.51	5.0	8.83	9.11	3.2	40.3	41.0
Cutlery, hand tools and hardware	283.28	297.79	5.1	7.32	7.52	2.7	38.7	39.6
Fabricated structural metal products	350.55	373.60	6.6	8.83	9.09	2.9	39.7	41.1
Screw machine products	315.79	343.14	8.7	7.74	8.17	5.6	40.8	42.0
Metal forgings and stampings	464.80	480.80	3.4	11.20	11.53	2.9	41.5	41.7
Miscellaneous fabricated metal products	321.57	334.82	4.1	7.94	8.01	0.9	40.5	41.8
Machinery, except electrical	411.68	433.89	5.4	10.19	10.43	2.4	40.4	41.6
Engines and turbines	403.88	435.09	7.7	10.77	11.36	5.5	37.5	38.3
Metalworking machinery	365.88	388.93	6.3	9.31	9.44	1.4	39.3	41.2
Special industry machinery	380.42	415.09	9.1	9.83	10.30	4.8	38.7	40.3
General industrial machinery	382.57	401.98	5.1	9.71	9.95	2.5	39.4	40.4
Office and computing machines	385.63	404.42	4.9	9.27	9.34	0.8	41.6	43.3
Refrigeration and service industry machinery	379.32	424.27	11.9	9.32	10.15	8.9	40.7	41.8

Table 23. (continued)

Industry	Production or nonsupervisory worker averages							
	Weekly earnings			Hourly earnings			Weekly hours	
	1983	1984	Percent change	1983	1984	Percent change	1983	1984
Durable goods (continued)								
Electrical and electronic equipment	$346.39	$361.79	4.4	$ 8.49	$ 8.76	3.2	40.8	41.3
Electrical industrial apparatus	461.96	485.06	5.0	11.24	11.66	3.7	41.1	41.6
Electric lighting and wiring equipment	317.38	329.61	3.9	8.18	8.43	3.1	38.8	39.1
Radio and TV receiving equipment	212.44	238.68	12.4	5.62	5.85	4.1	37.8	40.8
Communication equipment	419.34	442.19	5.4	9.89	10.38	5.0	42.4	42.6
Electronic components and accessories	285.23	296.49	3.9	6.94	7.11	2.4	41.1	41.7
Transportation equipment	515.76	569.42	10.4	12.28	13.06	6.4	42.0	43.6
Motor vehicles and equipment	545.07	603.17	10.7	13.04	13.93	6.8	41.8	43.3
Instruments and related products	422.69	449.28	6.3	10.36	10.80	4.2	40.8	41.6
Engineering and scientific instruments	441.98	464.67	5.1	10.65	11.17	4.9	41.5	41.6
Measuring and controlling devices	310.72	336.57	8.3	7.56	8.11	7.3	41.1	41.5
Medical instruments and supplies	281.78	305.60	8.5	7.08	7.64	7.9	39.8	40.0
Ophthalmic goods	284.40	299.47	5.3	7.20	7.62	5.8	39.5	39.3
Photographic equipment and supplies	492.79	526.61	6.9	11.99	12.42	3.6	41.1	42.4
Miscellaneous manufacturing industries	272.08	278.94	2.5	7.16	7.36	2.8	38.0	37.9
Toys and sporting goods	248.03	258.69	4.3	6.51	6.88	5.7	38.1	37.6
Costume jewelry and notions	218.95	222.68	1.7	5.87	5.97	1.7	37.3	37.3
Nondurable goods	303.24	320.12	5.6	7.98	8.33	5.0	38.0	38.2
Food and kindred products	358.07	375.05	4.7	8.67	9.17	5.8	41.3	40.9
Preserved fruits and vegetables	284.81	293.63	3.1	6.83	7.25	6.1	41.7	40.5
Beverages	400.00	410.44	2.6	9.78	10.21	4.4	40.9	40.2
Textile mill products	238.94	251.70	5.3	6.08	6.34	4.3	39.3	39.7
Broadwoven fabric mills	245.63	262.80	7.0	6.38	6.67	4.5	38.5	39.4
Textile finishing, except wool	309.18	315.55	2.1	7.45	7.39	-0.8	41.5	42.7

Table 23. (continued)

Industry	Production or nonsupervisory worker averages							
	Weekly earnings			Hourly earnings			Weekly hours	
	1983	1984	Percent change	1983	1984	Percent change	1983	1984
Nondurable goods (continued)								
Apparel and other textile products	$215.00	$225.63	4.9	$ 6.25	$ 6.54	4.6	34.4	34.5
Men's and boy's suits and coats	263.51	271.22	2.9	7.34	7.35	0.1	35.9	36.9
Men's and boy's furnishings	203.29	204.24	0.5	5.45	5.55	1.8	37.3	36.8
Women's and misses' outerwear	212.83	227.40	6.8	6.43	6.87	6.8	33.1	33.1
Women's and children's undergarments	193.80	198.48	2.4	5.49	5.72	4.2	35.3	34.7
Miscellaneous apparel and accessories	205.77	216.13	5.0	5.93	6.14	3.5	34.7	35.2
Miscellaneous fabricated textile products	201.12	211.76	5.3	5.48	5.77	5.3	36.7	36.7
Paper and allied products	354.06	380.88	7.6	8.45	8.92	5.6	41.9	42.7
Paper mills, except building paper	475.04	528.56	11.3	10.26	11.27	9.8	46.3	46.9
Miscellaneous converted paper products	297.82	310.90	4.4	7.39	7.62	3.1	40.3	40.8
Paperboard containers and boxes	347.27	375.20	8.0	8.47	8.87	4.7	41.0	42.3
Printing and publishing	411.40	438.07	6.5	11.00	11.62	5.6	37.4	37.7
Books	375.84	393.50	4.7	9.28	9.74	5.0	40.5	40.4
Commerical printing	427.35	451.16	5.6	11.10	11.48	3.4	38.5	39.3
Blankbooks and bookbinding	289.92	303.01	4.5	7.55	7.85	4.0	38.4	38.6
Chemicals and allied products	419.98	439.94	4.8	10.12	10.55	4.2	41.5	41.7
Industrial inorganic chemicals	487.63	507.53	4.1	12.13	12.72	4.9	40.2	39.9
Plastics materials and synthetics	462.77	482.45	4.3	10.47	10.94	4.5	44.2	44.1
Drugs	403.10	430.19	6.7	9.69	10.17	5.0	41.6	42.3
Soap, cleaners and toilet goods	380.00	389.76	2.6	9.50	9.60	1.1	40.0	40.6
Industrial organic chemicals	473.67	499.14	5.4	10.99	11.80	7.4	43.1	42.3
Rubber and miscellaneous plastics products	304.31	313.53	3.0	7.57	7.78	2.8	40.2	40.3
Rubber and rubber products	427.82	443.08	3.6	9.79	10.07	2.9	43.7	44.0
Leather and leather products	213.38	218.42	2.4	5.66	5.84	3.2	37.7	37.4
Footwear, except rubber	198.14	209.28	5.6	5.16	5.38	4.3	38.4	38.9
Handbags and personal leather goods	199.58	211.12	5.8	5.28	5.80	9.8	37.8	36.4

Table 23. (continued)

Industry	Production or nonsupervisory worker averages							
	Weekly earnings			Hourly earnings			Weekly hours	
	1983	1984	Percent change	1983	1984	Percent change	1983	1984
Nonmanufacturing								
Construction	$514.04	$552.74	7.5	$14.20	$15.02	5.8	36.2	36.8
Telephone and telegraph communications	508.16	552.18	8.7	12.80	13.37	4.5	39.7	41.3
Electric, gas and sanitary service	546.13	588.31	7.7	12.79	13.81	8.0	42.7	42.6
Wholesale and retail trade, except eating and drinking places	250.17	262.31	4.9	7.49	7.83	4.5	33.4	33.5
Wholesale trade	352.69	373.69	6.0	9.38	9.86	5.1	37.6	37.9
Retail trade, except eating and drinking places	184.20	193.41	5.0	6.00	6.30	5.0	30.7	30.7
Department stores	163.39	169.40	3.7	5.92	6.16	4.1	27.6	27.5
Banking	287.65	298.45	3.8	8.08	8.36	3.5	35.6	35.7
Hotels, motels and tourist courts	237.86	230.08	-3.3	7.41	7.19	-3.0	32.1	32.0

Statewide hourly earnings in durable goods industries broadened by 3.4 percent (+33 cents) since 1983. Held back by reductions in blast furnaces and basic steel products (-2.4 percent) and iron and steel foundries (-10.7 percent), hourly scales in primary metals were unchanged over the year. All other "hard goods" categories moved ahead over the 12 months, with the largest changes in lumber and wood products (+8.7 percent), transportation equipment (+6.4 percent) and instruments (+4.2 percent).

Hourly pay in nondurable goods firms accelerated to $8.38 in 1984, up 40 cents (+5.0 percent) from 1983. Largest gainers over the 12 months were in food (+5.8 percent), and the paper and printing industries (both up 5.6 percent). Average hourly earnings in nondurables in the U.S. rose 29 cents to $8.37 over the year.

On the state's nonfactory side, hourly earnings dropped 3.0 percent in hotels, motels and tourist courts over the year but showed improvements in all other categories. The largest advance was in the electric, gas and sanitary service segment, where hourly pay was up $1.02 or 8.0 percent since 1983.

A speed-up from 2.5 to 3.0 in average overtime hours (Table 24) forced a comparable change from 39.3 to 39.8 in average weekly hours in the state's factories since 1983. The change in the workweek at the national level was similar, broadening from 40.1 hours in 1983 to 40.7 hours in 1984.

Except for a nominal drop in miscellaneous manufacturing, the workweek in New York State was lengthened over the 12 months in all major durable goods components as overtime hours were expanded. Overtime was hiked by an hour or more in both primary metals and transportation equipment. The latter category recorded the longest workweek (43.6 hours) in durable goods in 1984.

Average weekly hours in nondurable goods averaged 38.2 hours in 1984, up fractionally since 1983; overtime inched upward from 2.5 to 2.7 hours. The workweek lengthened in most major categories over the year but hours were cut in the food and kindred products and leather industries.

Changes in the workweek in the nonfactory components from year-to-year were negligible. The department store average was 27.5 hours in 1984, the lowest for any category, and a reflection of the practice of hiring part-time workers.

Table 24. ANNUAL AVERAGE OVERTIME HOURS OF PRODUCTION WORKERS IN SELECTED MANUFACTURING INDUSTRIES, NEW YORK STATE 1983-1984

Industry	Average weekly overtime hours		Overtime hours as percent of total hours	
	1983	1984	1983	1984
All manufacturing	2.5	3.0	6.4	7.5
Durable goods	2.6	3.3	6.4	8.0
Lumber and wood products, except furniture	2.3	2.9	5.9	7.3
Furniture and fixtures	2.3	2.6	5.8	6.5
Stone, clay, glass and concrete products	3.3	4.0	8.0	9.6
Primary metal industries	2.9	3.9	7.1	9.4
Fabricated metal products	2.6	3.3	6.5	8.0
Machinery, except electrical	2.5	3.3	6.2	7.9
Electrical and electronic machinery, equipment and supplies	2.4	2.8	5.9	6.8
Transportation equipment	4.2	5.4	10.0	12.4
Instruments and related products	1.8	2.5	4.4	6.0
Miscellaneous manufacturing industries	1.7	1.7	4.5	4.5
Nondurable goods	2.5	2.7	6.6	7.1
Food and kindred	3.9	4.0	9.4	9.8
Textile mill products	3.3	3.3	8.4	8.3
Apparel and other finished textile products	0.9	1.1	2.6	3.2
Paper and allied products	3.9	4.5	9.3	10.5
Printing, publishing and allied products	3.3	3.6	8.8	9.5
Chemicals and allied products	3.0	3.5	7.2	8.4
Leather and leather products	1.5	1.3	4.0	3.5

OCCUPATIONAL SUPPLY AND DEMAND

This section contains information on recent statewide supply and demand for workers by occupation for the last half of calendar year 1984.

Applicants and Openings

Labor supply and demand statistics were derived from data for the period July 1 - December 31, 1984, compiled by the New York State Labor Department's Job Service and Training Division. Demand is depicted by the volume of job openings received during the period, while the supply of workers is reflected by counts of individual job applicants. Although considerable in scope and detail, the data represent only the experience of the Job Service in serving the labor market. This information does not indicate all activity in the labor market nor does it comprise a perfectly representative sample of the marketplace. (Some applicant groups, such as women, and some employer groups, such as those operating under provisions of government contracts, tend to be more heavily represented in Job Service statistics.) In the absence of more comprehensive coverage of all labor market transactions, however, Job Service data provide valuable clues to supply and demand conditions existing in a wide range of occupations in this state. The reader who requires more extensive information should utilize other sources, such as: the output of training programs; reports on labor market conditions in particular industries where some occupations predominate (such as Occupational Employment Statistics); counts of the volume and variety of classified advertising for employment openings; and the informed opinions of local educators, employers, planners, and Job Service personnel.

In order to provide the reader with more meaningful data, statistics on applicants and openings in several occupations have been removed from the text and tables in this section. The Job Service maintains registries for a few occupations where available workers are matched with short-term (usually 3 days or less) openings. An applicant who might not be available for full-time work could fill a large number of these short-term openings during the year and thereby skew the overall supply-demand picture. Data from nurse's and teacher's registries, along with those of material handler, cashier II, inventory clerk, day worker, sales attendant, harvest worker (fruit), and school secretary were deleted from this section.

Overview: There were 842,430 job applicants available at New York State Job Service offices during the most recent six-month period (July 1-December 31, 1984); 283,617 job openings were received during the same time period. After removal of short-term openings and registry data, registered applicants numbered 782,206 and job openings received totaled 183,608.

The clerical and sales category recorded both the largest number of available applicants (245,174) and the largest number of job openings (69,670). The service component was the second largest category for both, accounting for 144,540 applicants and 40,266 openings.

Job Service data yielded an average applicants-to-openings (A/O) ratio of 4.3 for all occupations during the six-month period. This ratio, defined as the number of applicants registered divided by the number of openings received,

is used to describe occupational demand and supply. Ratios for specific occupations or occupational groupings are compared with the average for all occupations to determine the job outlook. A high A/O ratio indicates a likely applicant oversupply and less favorable prospects for employment in that occupation. A low A/O ratio shows that demand and supply are in better balance and employment prospects are more favorable. Of all major occupational categories, agricultural, fishery, forestry and related occupations had the lowest A/O ratio. Processing, clerical and sales, service and benchwork occupational groups also had A/O ratios less than the 4.3 average for all occupations. A listing of A/O ratios by occupational category is found in Table 25.

Table 25. APPLICANTS TO OPENINGS RATIO, APPLICANTS PLACED AS A PERCENT OF APPLICANTS REGISTERED, AND OPENINGS FILLED AS A PERCENT OF OPENINGS RECEIVED, BY OCCUPATIONAL CATEGORY
NEW YORK STATE, JULY 1 - DECEMBER 31, 1984

Occupational code and title	Applicants to openings ratio	Percent	
		Applicants placed of applicants registered	Openings filled of openings received
Total	4.3	11.6	64.5
0, 1 Professional, technical and managerial	8.1	4.8	46.5
2 Clerical and sales	3.5	17.7	71.9
3 Service	3.6	13.6	63.5
4 Agricultural, fishery, forestry and related	2.0	27.4	72.6
5 Processing	3.0	25.2	77.4
6 Machine trades	5.3	9.2	49.6
7 Benchwork	4.0	14.0	60.9
8 Structural work	5.5	8.4	46.8
9 Miscellaneous	5.3	8.6	62.4

Applicants had the greatest likelihood to be placed in a job in the agricultural, fishery, forestry and related occupations (27.4 percent) and the processing category (25.2 percent). These percentages are obtained by dividing applicants placed by applicants registered, and expressing the result as a percent. Applicants in the professional, technical and managerial category were the least likely to be placed in a job (4.8 percent).

The percentage of job openings filled averaged 64.5 percent for all occupations, but ranged from a high of 77.4 percent for the processing group to a low of 46.5 percent for the professional, technical and managerial category. Tables 26 and 27 show the volume and distribution of job applicants and openings, by occupational category, during the second half of calendar year 1984.

Table 26. JOB SERVICE APPLICANTS AND OPENINGS BY OCCUPATIONAL CATEGORY
NEW YORK STATE, JULY 1 - DECEMBER 31, 1984

Occupational code and title	Applicants			Job openings	
	Registered	Placed	Active e.o.p.	Received	Filled
Total	782,206	90,500	463,348	183,608	118,446
0, 1 Professional, technical and managerial	79,360	3,825	47,647	9,833	4,577
2 Clerical and sales	245,174	43,442	133,930	69,670	50,084
3 Service	144,540	19,700	81,736	40,266	25,560
4 Agricultural, fishery, forestry and related	10,864	2,979	4,296	5,389	3,911
5 Processing	14,555	3,669	6,711	4,832	3,741
6 Machine trades	39,952	3,686	20,673	7,564	3,748
7 Benchwork	63,723	8,894	37,270	15,971	9,730
8 Structural work	58,728	4,949	27,949	10,756	5,033
9 Miscellaneous	103,273	8,871	67,584	19,327	12,062

NOTE: Detail data for applicants registered and active e.o.p. (end of period) are less than the total because the latter includes partially registered applicants not assigned to an occupational group. Detail data for applicants placed exceeds total placed because an applicant may be placed in more than one occupational group during the period.

Table 27. PERCENT DISTRIBUTION OF JOB SERVICE APPLICANTS AND OPENINGS BY OCCUPATIONAL CATEGORY
NEW YORK STATE, JULY 1 - DECEMBER 31, 1984

Occupational code and title	Applicants			Job openings	
	Registered	Placed	Active e.o.p.	Received	Filled
Total	100.0	100.0	100.0	100.0	100.0
0, 1 Professional, technical and managerial	10.1	4.2	10.3	5.4	3.9
2 Clerical and sales	31.3	48.0	28.9	37.9	42.3
3 Service	18.5	21.8	17.6	21.9	21.6
4 Agricultural, fishery, forestry and related	1.4	3.3	0.9	2.9	3.3
5 Processing	1.9	4.1	1.4	2.6	3.2
6 Machine trades	5.1	4.1	4.5	4.1	3.2
7 Benchwork	8.1	9.8	8.0	8.7	8.2
8 Structural work	7.5	5.5	6.0	5.9	4.2
9 Miscellaneous	13.2	9.8	14.6	10.5	10.2

NOTE: Detail data for applicants registered and active e.o.p. (end of period) are less than the total because the latter includes partially registered applicants not assigned to an occupational group. Detail data for applicants placed exceeds total placed because an applicant may be placed in more than one occupational group during the period.

Labor Supply and Demand: Data drawn from the Employment Security Automated Reporting System (ESARS) of the New York State Job Service form the largest available file on applicants and job openings in the state's labor market. The following analysis is based on ESARS statistics--job openings received, job applicants registered, and jobs filled during the six-month period July 1 - December 31, 1984. Tables 28 through 31 make use of the nine-digit occupational codes based on the fourth edition of the Dictionary of Occupational Titles (DOT), published in 1977.

Although the discussion in this section is centered on statewide Job Service data, the job market for many occupations is not a statewide market, nor are job applicants and openings distributed evenly throughout the state. A statewide market implies job mobility, that is, job applicants are presumed willing to relocate within the state for employment. However, many opportunities are not attractive enough to induce workers to relocate; such jobs are therefore limited to the labor supply of a local labor market or sub-area. In all, 192 occupations with a minimum of 400 applicants available or of 200 job openings received during the six-month period were selected for review; fewer applicants or openings, in the context of a statewide labor market, were considered impractical for analysis.

Of the 192 occupations studied, almost two-thirds (124) had applicants-to-openings (A/O) ratios less than the average A/O ratio for all occupations of 4.3. Of these occupations (listed in Table 28), nearly one-third (31.5 percent) were in the clerical and sales category and another quarter were in the services group.

Table 28. OCCUPATIONS WITH LOWEST RATIOS
OF JOB APPLICANTS TO JOB OPENINGS
NEW YORK STATE
JULY 1 - DECEMBER 31, 1984

Occupational code [a]	and title	Ratio
	0.1 - 0.5	
202.362-800	Legal stenographer	0.1
781.381-026	Patternmaker	0.2
372.363-010	Protective officer (government service)	0.2
313.381-014	Baker, pizza	0.3
404.687-014	Harvest worker, field crop	0.3
075.124-010	Nurse, school	0.3
905.687-010	Truck-driver helper	0.4
363.682-014	Presser, all-around	0.4
402.687-010	Farmworker, vegetable II	0.5
363.682-018	Presser, machine	0.5
402.687-014	Harvest worker, vegetable	0.5
919.663-010	Deliverer, car rental	0.5
	0.6 - 1.0	
301.687-010	Caretaker (domestic service)	0.6
785.361-810	Sample stitcher, ladies' sportswear	0.6
785.361-804	Sample stitcher, ladies' dresses	0.7
199.267-018	Examination proctor (government service)	0.7
211.582-010	Food tabulator, cafeteria	0.8
299.357-014	Telephone solicitor	0.8
209.687-014	Mail handler (government service)	0.8
379.667-014	Lifeguard	0.8
311.677-018	Dining room attendant	0.9
403.687-010	Farmworker, fruit II	0.9
769.687-054	Woodworking-shop hand	0.9
529.686-014	Cannery worker	0.9
786.682-870	Overlock sewing machine operator, ladies' sportswear	0.9
786.682-831	Lockstitch-machine operator, ladies' sportswear	1.0
209.362-010	Circulation clerk (printing and publishing)	1.0
202.362-014	Stenographer	1.0
249.367-074	Teacher aide II	1.0
	1.1 - 1.5	
159.124-010	Counselor, camp	1.1
099.227-034	Tutor	1.1
311.477-014	Counter attendant, lunchroom or coffee shop	1.1
341.367-010	Recreation-facility attendant	1.1
311.477-026	Waiter/waitress	1.1
075.374-010	Nurse, general duty	1.1
249.367-046	Library assistant	1.2
203.582-066	Typist	1.2
279.357-054	Salesperson, general merchandise	1.2
290.477-018	Sales clerk, food	1.3
279.357-014	Sales representative, general merchandise	1.3
309.677-010	Companion (domestic service)	1.3

Table 28. (continued)

Occupational code [a]	and title	Ratio
	1.1 - 1.5 (continued)	
529.686-070	Production helper (canning and preserving)	1.4
313.361-014	Cook	1.4
311.677-010	Cafeteria attendant	1.5
	1.6 - 2.0	
209.567-600	Clerk, general II	1.6
290.477-014	Sales clerk	1.6
729.687-010	Assembler, electrical accessories	1.6
556.382-014	Injection-molding-machine operator	1.7
292.353-010	Driver, sales route	1.7
726.684-018	Electronics assembler	1.7
323.687-018	Housecleaner (hotel and restaurant)	1.8
323.687-014	Cleaner, housekeeping	1.8
311.677-014	Counter attendant, cafeteria	1.8
408.687-014	Laborer, landscape	1.8
355.377-014	Psychiatric aide	1.9
299.477-010	Deliverer, merchandise	1.9
249.367-054	Order clerk	1.9
318.687-010	Kitchen helper	2.0
	2.1 - 2.5	
237.367-038	Receptionist	2.1
406.687-010	Groundskeeper, parks and grounds	2.1
862.381-030	Plumber (construction)	2.1
230.667-010	Deliverer, outside (clerical)	2.1
922.687-058	Laborer, stores (any industry)	2.2
915.467-010	Automobile-service-station attendant	2.2
372.667-034	Guard, security	2.2
363.684-018	Presser, hand	2.2
209.587-026	Mail clerk	2.2
238.362-010	Hotel clerk	2.3
406.684-014	Groundskeeper, industrial-commercial	2.3
211.362-010	Cashier I	2.3
299.367-014	Stock clerk, self service store	2.3
323.687-010	Cleaner, hospital	2.3
239.567-010	Office helper	2.4
209.567-010	Meter reader	2.4
211.462-018	Cashier-wrapper	2.5
211.462-014	Cashier-checker	2.5
209.562-010	Clerk, general	2.5
	2.6 - 3.0	
222.387-058	Stock clerk	2.6
782.684-058	Sewer, hand	2.6
860.381-022	Carpenter (construction)	2.6
201.362-010	Legal secretary	2.7
211.362-018	Teller	2.7
313.361-022	Cook, short order I	2.8
840.381-010	Paperhanger (construction)	2.8
906.683-022	Truck driver, light	2.8

Table 28. (continued)

Occupational code [a]	and title	Ratio
	2.6 - 3.0 (continued)	
866.381-010	Roofer (construction)	2.8
311.477-030	Waiter/waitress, informal	2.9
609.685-018	Production-machine tender	2.9
739.687-030	Assembler, small products	2.9
317.687-010	Cook helper (hotel and restaurant)	3.0
261.357-066	Salesperson, women's apparel and accessories	3.0
410.684-010	Farmworker, dairy	3.0
	3.1 - 3.5	
509.686-010	Laborer, general (iron and steel)	3.1
920.685-078	Packager, machine	3.2
600.280-022	Machinist	3.2
824.261-010	Electrician	3.2
829.684-022	Electrician helper	3.3
620.261-010	Automobile mechanic	3.3
807.381-010	Automobile-body repairer	3.3
355.677-010	Food-service worker, hospital	3.3
210.382-014	Bookkeeper I	3.3
311.477-018	Waiter/waitress, bar	3.4
726.687-010	Electronics worker	3.4
381.687-018	Cleaner, industrial	3.4
201.362-807	Secretary, no shorthand	3.4
001.261-010	Drafter, architectural	3.4
783.682-014	Sewing-machine operator (leather products)	3.5
354.377-014	Home attendant (personal service)	3.5
	3.6 - 4.0	
706.687-010	Assembler, production	3.6
313.671-010	Cook, short order II	3.6
201.362-030	Secretary	3.7
235.662-022	Telephone operator	3.7
913.463-010	Bus driver	3.7
731.687-034	Toy assembler	3.8
203.362-010	Clerk-typist	3.8
381.687-014	Cleaner, commercial or institutional	3.8
166.267-010	Employment interviewer	3.8
	4.1 - 4.2	
222.387-050	Shipping and receiving clerk	4.1
315.361-010	Cook	4.1
210.382-018	Bookkeeper II	4.1
869.687-026	Construction worker II	4.1
638.281-014	Maintenance mechanic	4.2
003.161-014	Electronics technician	4.2
706.684-022	Assembler, small parts	4.2

a. The number assigned to an occupation in the Dictionary of Occupational Titles (DOT), Fourth Edition, 1977.

If a large number of applicants are competing for limited numbers of available jobs in certain occupations, high A/O ratios will result. Along with a general lack of labor demand, the high ratios are attributable to several additional factors. Among these are structural problems in the labor market, including geographic dislocation of workers and jobs, and rapid technological change, where qualifications of individuals applying for the jobs do not precisely match the hiring requirements of a particular employer.

Of the 192 occupations reviewed, 68 with A/O ratios equal to or higher than the average for all occupations are shown in Table 29. These occupations are listed by ascending A/O ratio.

Table 29. OCCUPATIONS WITH HIGHEST RATIOS OF JOB APPLICANTS TO JOB OPENINGS NEW YORK STATE JULY 1 - DECEMBER 31, 1984

Occupational code [a] and title		Ratio
	4.3 - 5.9	
203.362-014	In-file operator (business service)	4.3
372.667-038	Merchant patroller (business service)	4.4
312.474-010	Bartender	4.4
216.482-010	Accounting clerk	4.4
787.682-046	Sewing-machine operator	4.5
905.663-014	Truck driver, heavy	4.7
381.687-010	Central-supply worker (medical service)	4.7
899.381-010	Maintenance repairer, building	4.8
780.684-062	Fabricator, foam rubber	4.9
219.362-010	Administrative clerk	5.0
359.677-010	Attendant, children's institution	5.1
869.664-014	Construction worker I	5.1
810.384-014	Welder, arc	5.1
206.362-010	File clerk I	5.1
090.227-010	Faculty member, college or university	5.3
203.582-054	Terminal operator (clerical)	5.3
904.383-010	Tractor-trailer-truck driver	5.3
860.381-042	Carpenter, rough (construction)	5.4
203.362-500	Word-processing operator	5.4
007.281-010	Drafter, mechanical	5.5
408.161-010	Landscape, gardener	5.5
359.677-018	Nursery school attendant	5.7
382.664-010	Janitor	5.8
828.281-010	Electronics mechanic	5.9
213.362-010	Computer operator	5.9
	6.0 - 9.9	
007.061-014	Mechanical engineer	6.0
619.685-062	Machine operator II	6.0
079.371-010	Dental assistant	6.0
355.674-014	Nurse aide	6.1
620.684-014	Automobile-mechanic helper	6.1

Table 29. (continued)

Occupational code [a]	and title	Ratio
	6.0 - 9.9 (continued)	
299.137-010	Manager, department (retail trade)	6.2
203.582-030	Keypunch operator	6.3
045.107-010	Counselor	6.5
195.367-010	Case aide (social services)	6.5
201.362-014	Medical secretary	7.0
913.463-018	Taxi driver	7.2
355.674-010	Child-care attendant, school	7.3
189.167-018	Management trainee	7.4
141.061-018	Graphic designer	7.4
321.137-010	Housekeeper	7.6
185.167-046	Manager, retail store	7.7
786.682-194	Overlock sewing machine operator, garment	8.0
301.474-010	Houseworker, general	8.0
195.167-010	Community organization worker	8.1
616.360-018	Machine operator I	8.1
316.684-018	Meat cutter	8.4
819.384-010	Welder, combination	8.4
020.162-014	Programmer, business	8.5
920.587-018	Packager, hand	8.5
162.157-038	Purchasing agent	8.7
160.167-010	Accountant	8.9
187.167-106	Manager, food service	9.1
206.367-014	File clerk II	9.8
	10.0+	
786.682-170	Lockstitch-machine operator, garment	10.3
169.167-010	Administrative assistant	12.9
921.683-050	Industrial-truck operator	13.4
183.117-014	Production superintendent	13.5
859.683-010	Operating engineer	15.9
789.687-046	Final assembler, garment	16.7
332.271-010	Cosmetologist	17.3
079.367-010	Medical assistant	18.4
169.167-034	Manager, office	20.1
163.167-018	Manager, sales	21.4
165.067-010	Public relations representative	24.9
142.061-018	Clothes designer	39.5
806.684-010	Assembler, automobile	49.9
781.687-070	Trimmer, hand	106.4
301.137-010	Housekeeper, home	303.0

a. The number assigned to an occupation in the Dictionary of Occupational Titles (DOT), Fourth Edition, 1977.

Occupations with substantial demand. During the period July 1 - December 31, 1984, the Job Service received a large volume of job openings in some occupations. In all, 66 occupations had 500 or more job openings over the period. Of those, about 41 percent were included in the clerical and sales occupational group. Table 30 lists those occupations for which substantial numbers of job openings were registered with the Job Service.

Table 30. OCCUPATIONS WITH A SUBSTANTIAL NUMBER OF OPENINGS
NEW YORK STATE
JULY 1 - DECEMBER 31, 1984

Occupational code [a]	and title	Job Service openings received
	2,500+	
209.562-010	Clerk, general	11,300
209.567-600	Clerk, general II	5,404
211.582-010	Food tabulator, cafeteria	4,206
311.477-014	Counter attendant, lunchroom or coffee shop	3,986
905.687-010	Truck-driver helper	3,935
279.357-054	Salesperson, general merchandise	3,846
381.687-014	Cleaner, commercial or institutional	3,755
920.587-018	Packager, hand	3,300
318.687-010	Kitchen helper (hotel and restaurant)	3,123
202.362-800	Legal stenographer	3,081
211.462-014	Cashier-checker	2,986
372.667-034	Guard, security	2,642
203.362-010	Clerk-typist	2,594
922.687-058	Laborer, stores	2,531
	1,500 - 2,499	
313.361-014	Cook	2,455
237.367-038	Receptionist	2,128
290.477-014	Sales clerk, food	2,125
529.686-014	Cannery worker	1,834
363.682-018	Presser, machine	1,797
354.377-014	Home attendant	1,762
222.387-058	Stock clerk	1,736
311.477-030	Waiter/waitress, informal	1,684
323.687-014	Cleaner, housekeeping	1,679
906.683-022	Truck driver, light	1,604
	1,000 - 1,499	
201.362-030	Secretary	1,484
869.687-026	Construction worker II	1,445
726.684-018	Electronics assembler	1,397
311.477-026	Waiter/waitress, formal	1,350
239.567-010	Office helper	1,277
230.667-010	Deliverer, outside (clerical)	1,266
311.677-018	Dining room attendant	1,257
279.357-014	Sales representative, general merchandise	1,251
355.674-014	Nurse aide	1,189
219.362-010	Administrative clerk	1,175
869.664-014	Construction worker I	1,143
402.687-014	Harvest worker, vegetable	1,097
781.381-026	Patternmaker	1,084
203.582-066	Typist	1,032
249.367-074	Teacher aide II	1,029
290.477-018	Sales clerk, food	1,014

Table 30. (continued)

Occupational code [a]	Title	Job Service openings received
	700 - 999	
311.677-014	Counter attendant, cafeteria	972
860.381-022	Carpenter	970
211.362-010	Cashier I	918
222.387-050	Shipping and receiving clerk	900
402.687-010	Farmworker, vegetable II	877
620.261-010	Automobile mechanic	851
739.687-030	Assembler, small products	818
899.381-010	Maintenance repairer, building	775
210.382-014	Bookkeeper I	755
301.687-010	Caretaker	748
209.362-010	Circulation clerk	739
299.367-014	Stock clerk, self-service store	729
313.361-022	Cook, short order I	721
905.663-014	Truck driver, heavy	718
299.357-014	Telephone solicitor	708
	500 - 699	
075.124-010	Nurse, school	691
209.587-026	Mail clerk	685
609.685-018	Production-machine tender	680
202.362-014	Stenographer	663
840.381-010	Paperhanger	648
199.267-018	Examination proctor (government service)	638
216.482-010	Accounting clerk	622
786.682-831	Lockstitch-machine operator, ladies' sportswear	607
706.687-010	Assembler, production	603
706.684-022	Assembler, small parts	522
919.663-010	Deliverer, car rental	505

a. The number assigned to an occupation in the Dictionary of Occupational Titles (DOT), Fourth Edition, 1977.

Occupations with substantial supply: The Job Service recorded 88 occupations with 1,000 or more applicants during the six-month period (July 1 - December 31, 1984). Over one-third of the occupations were clerical and sales, while another one-fifth were in the services category (see Table 31).

Table 31. OCCUPATIONS WITH A SUBSTANTIAL NUMBER OF APPLICANTS
NEW YORK STATE
JULY 1 - DECEMBER 31, 1984

Occupational code [a]	and title	Job Service applicants registered
	5,000+	
209.562-010	Clerk, general	28,332
920.587-018	Packager, hand	28,088
381.687-014	Cleaner, commercial or institutional	14,295
203.362-010	Clerk-typist	9,810
209.567-600	Clerk, general II	8,496
211.462-014	Cashier-checker	7,386
355.674-014	Nurse aide	7,265
789.687-046	Final assembler, garment	6,896
354.377-014	Home attendant	6,242
318.687-010	Kitchen helper	6,104
869.687-026	Construction worker II	5,960
219.362-010	Administrative clerk	5,926
869.664-014	Construction worker I	5,837
372.667-034	Guard, security	5,728
922.687-058	Laborer, stores	5,458
201.362-030	Secretary	5,425
	2,000 - 4,999	
311.477-030	Waiter/waitress, informal	4,826
279.357-054	Salesperson, general merchandise	4,693
906.683-022	Truck driver, light	4,444
222.387-058	Stock clerk	4,437
237.367-038	Receptionist	4,375
311.477-014	Counter attendant, lunchroom or coffee shop	4,348
899.381-010	Maintenance repairer, building	3,753
222.387-050	Shipping and receiving clerk	3,650
313.361-014	Cook	3,408
905.663-014	Truck driver, heavy	3,350
290.477-014	Sales clerk	3,344
211.582-010	Food tabulator, cafeteria	3,238
239.567-010	Office helper	3,101
323.687-014	Cleaner, housekeeping	3,026
301.474-010	Houseworker, general	2,787
620.261-010	Automobile mechanic	2,774
216.482-010	Accounting clerk	2,768
230.667-010	Deliverer, outside (clerical)	2,685
860.381-022	Carpenter	2,560
210.382-014	Bookkeeper I	2,528
726.684-018	Electronics assembler	2,419
739.687-030	Assembler, small products	2,409
904.383-010	Tractor-trailer-truck driver	2,362
706.684-022	Assembler, small parts	2,212
169.167-010	Administrative assistant	2,207
706.687-010	Assembler, production	2,160
921.683-050	Industrial-truck operator	2,155

Table 31. (continued)

Occupational code [a]	and title	Job Service applicants registered
	2,000 - 4,999 (continued)	
211.362-010	Cashier I	2,137
206.362-010	File clerk I	2,128
185.167-046	Manager, retail store	2,117
786.682-170	Lockstitch-machine operator, garment	2,108
787.682-046	Sewing-machine operator	2,058
210.382-018	Bookkeeper II	2,013
	1,000 - 1,999	
313.361-022	Cook, short order I	1,985
609.685-018	Production-machine tender	1,957
312.474-010	Bartender	1,867
382.664-010	Janitor	1,834
840.381-010	Paperhanger	1,797
311.677-014	Counter attendant, cafeteria	1,790
189.167-018	Management trainee	1,776
213.362-010	Computer operator	1,773
299.367-014	Stock clerk, self-service store	1,704
529.686-014	Cannery worker	1,674
279.357-014	Sales representative, general merchandise	1,639
209.587-026	Mail clerk	1,534
311.477-026	Waiter/waitress, formal	1,534
905.687-010	Truck-driver helper	1,488
381.687-018	Cleaner, industrial	1,471
810.384-014	Welder, arc	1,431
160.167-010	Accountant	1,423
355.677-010	Food service worker, hospital	1,404
203.582-030	Keypunch operator	1,306
290.477-018	Sales clerk, food	1,281
781.687-070	Trimmer, hand	1,277
235.662-022	Telephone operator	1,256
187.167-106	Manager, food service	1,248
201.362-010	Legal secretary	1,230
203.582-066	Typist	1,224
203.582-054	Terminal operator (clerical)	1,212
211.362-018	Teller	1,187
359.677-018	Nursery school attendant	1,134
616.360-018	Machine operator I	1,108
169.167-034	Manager, office	1,107
249.367-074	Teacher aide II	1,076
620.684-014	Automobile-mechanic helper	1,075
311.677-018	Dining room attendant	1,073
859.683-010	Operating engineer	1,068
201.362-807	Secretary, no shorthand	1,066
600.280-022	Machinist	1,054
410.684-010	Farmworker, dairy	1,042
915.467-010	Automobile-service-station attendant	1,026
372.667-038	Merchant patroller	1,003

a. The number assigned to an occupation in the Dictionary of Occupational Titles (DOT), Fourth Edition, 1977.

OCCUPATIONAL OUTLOOK

This section contains recently published occupational projections for New York State for the period 1986-1988, as well as long-range national occupational outlook for the years 1982-1995. Included for the U.S. are occupations with the largest projected job growth, the fastest growing and the most rapidly declining occupations.

Occupational Projections for New York State, 1986-1988

Information on future industry growth and job opportunities in New York State has long been the interest of groups concerned with job training and vocational planning in the state. Assessment of the training needs of employed workers, new entrants and reentrants into the labor force, and unemployed persons has been of prime concern to industry, vocational counselors, and various government and social service agencies for many years. In response to these needs, the Occupational Retraining and Reemployment Act requires the New York State Department of Labor to develop a projection of job opportunities. The tables which follow present the projection of job openings in New York State for the period 1986 through 1988.

Methodology: Several measures of occupational demand are included in these projections. Expected employment levels are provided for the interval 1986 through 1988. The employment figures are based on nonagricultural wage and salary data, which is a count of the number of jobs in that sector, supplemented by estimates for self-employed, unpaid family, private household, and agricultural workers. These levels will differ from employment figures from the Current Population Survey and Census which are estimates of the number of employed persons living in the state. Therefore, estimates in this section are not strictly comparable to any other published series representing either jobs and/or employment.

Total projected average annual job openings by occupation are also provided, and are the sum of openings due to growth, separations, geographic mobility, and occupational mobility. Average annual job openings due to growth are calculated as the difference in occupational employment from the base and forecast period divided by the length of the forecast period.

Average annual job openings due to separations are an estimate of the number of job openings resulting from persons leaving the occupation for various reasons, e.g., death, retirement, family responsibility, etc. These estimates were derived from national occupational separation rates by sex and age applied to the sex/age components of occupations in New York State.

Average annual job openings from geographic and occupational outmobility are an essential part of any comprehensive discussion of projected job openings. In a study conducted by the New York State Department of Labor's Division of Research and Statistics, a methodology was developed for estimating job openings resulting from occupational and geographic outmobility. The ratios developed were derived from the New York State

Public Use Sample of the 1970 Census of Population supplemented by national data for detailed occupations. The Public Use Sample identified geographic and occupational mobility over a five-year period. These data, supplemented by national statistics, resulted in the calculation of annual ratios of geographic and occupational outmobility which were applied to the base year occupational employment levels. The projection of annual average job openings resulting from geographic and occupational outmobility represents approximately one-half of the total anticipated job openings over the period.

Making industry and occupational employment forecasts is an effort to evaluate complex and uncertain economic relationships within the framework of the available data. The most reliable use of these forecasts is in terms of trend direction and magnitude of employment growth or contraction, rather than as measures of absolute demand.

Limitations of the data: The forecasts presented in this publication are subject to the following major limitations:

1. Most of the industry employment forecasts upon which the occupational employment estimates are based, were controlled by an econometric model prepared contractually by Data Resources Incorporated with judicious management by Department staff. All forecasts are subject to the limiting assumptions upon which the model that generated them were built.

   It was assumed:

   a. The institutional framework of the U.S. economy will not change radically.

   b. Current social, technological, and scientific trends will continue, including values placed on work, education, income, and leisure.

   c. No major event which would significantly alter the industrial structure or the economic growth rate, such as a widespread or long-lasting energy shortage or war, will occur.

   d. Economic growth will slow significantly from its performance in recent years. The rate of growth in real GNP nationally should average 3.1 percent through the forecast period.

   e. Inflation will increase from the pace it has experienced recently--rises in the CPI are expected to average about 4.5 percent nationally from 1986-1988.

   f. The U.S. unemployment rate is forecast at 7.2 percent on an annual average basis over the period. New York's jobless rate should follow the nation's trend and average about one-half percentage point lower.

g. Trends in the occupational structure of industries will not be altered radically by changes in relative wages, technology, or other factors.

2. The occupational employment distributions used in the 1980 base year occupational matrix were developed from Occupational Employment Statistics sample data and, therefore, will vary somewhat from the actual level obtained from a census of all employers. The surveys from which these distributions were derived were conducted with an average target error of plus or minus 15 percent of the published occupational estimates. This matrix is the basis for the matrix used to produce the occupational projections in this report and its error band should be considered when interpreting the resultant forecasts.

3. State occupational projections are limited by the use of national data for self-employed and unpaid family worker ratios and labor force separation rate ratios. Furthermore, 1970 Census of Population data were used in the calculation of separation, geographic mobility, and occupational mobility rates.

Highlights: Following is a brief summary of some of the highlights of the occupational projections. For additional detail, see Tables 32 through 34 and Chart 7.

- An estimated 952,000 job openings are expected annually in the forecast period.
- Separations from the labor force and occupational mobility will account for approximately 8 in every 10 openings.
- Growth in employment will make available over 124,000 job opportunities annually.
- Clerical jobs will require the largest number of workers totaling more than 244,000 annually.
- Over 184,000 professional and technical workers will be needed to fill positions which will become available each year in the projected period.
- Service occupations will provide the third largest source of employment with about 150,000 openings expected annually.
- Managers and officials will account for over 10 percent of the available jobs totaling nearly 96,000 each year.
- Blue-collar jobs, including the crafts, operatives, and nonfarm laborers occupational groups, will provide almost 198,000 openings per year or one in every five occupational opportunities.
- An anticipated 74,000 jobs will be available in the sales category yearly.
- Demand for farm workers will exceed 6,000 openings annually through 1988.

Table 32. EMPLOYMENT AND ANNUAL AVERAGE JOB OPENINGS
NEW YORK STATE
PROJECTED 1986 AND 1988

(Numbers in thousands)

Occupational group	Employment		Change 1986-1988		Average annual openings 1986-1988				
	1986	1988	Net	Percent	Total	Growth	Separations	Geographic transfers	Occupational transfers
Total, all occupations	8,529.1	8,777.8	248.7	2.9	952.0	124.5	320.5	95.6	411.3
Professional and technical workers	1,720.9	1,780.8	59.9	3.5	184.5	30.0	55.7	30.9	67.8
Managers and officials	832.7	852.6	19.9	2.4	95.9	9.9	35.1	13.4	37.5
Sales workers	585.6	600.9	15.3	2.6	73.6	7.7	27.7	7.0	31.2
Clerical workers	1,981.7	2,048.8	67.1	3.4	244.1	33.6	77.3	19.9	113.2
Craft and kindred workers	788.3	806.1	17.8	2.3	73.2	9.0	26.0	7.3	31.0
Operatives	800.8	817.8	17.0	2.1	80.0	8.5	26.4	4.4	40.8
Service workers	1,388.8	1,435.9	47.1	3.4	149.8	23.6	60.1	9.9	56.2
Laborers and farm workers	430.4	434.9	4.5	1.0	50.9	2.3	12.3	2.8	33.6

NOTE: Detail may not add to totals due to rounding.

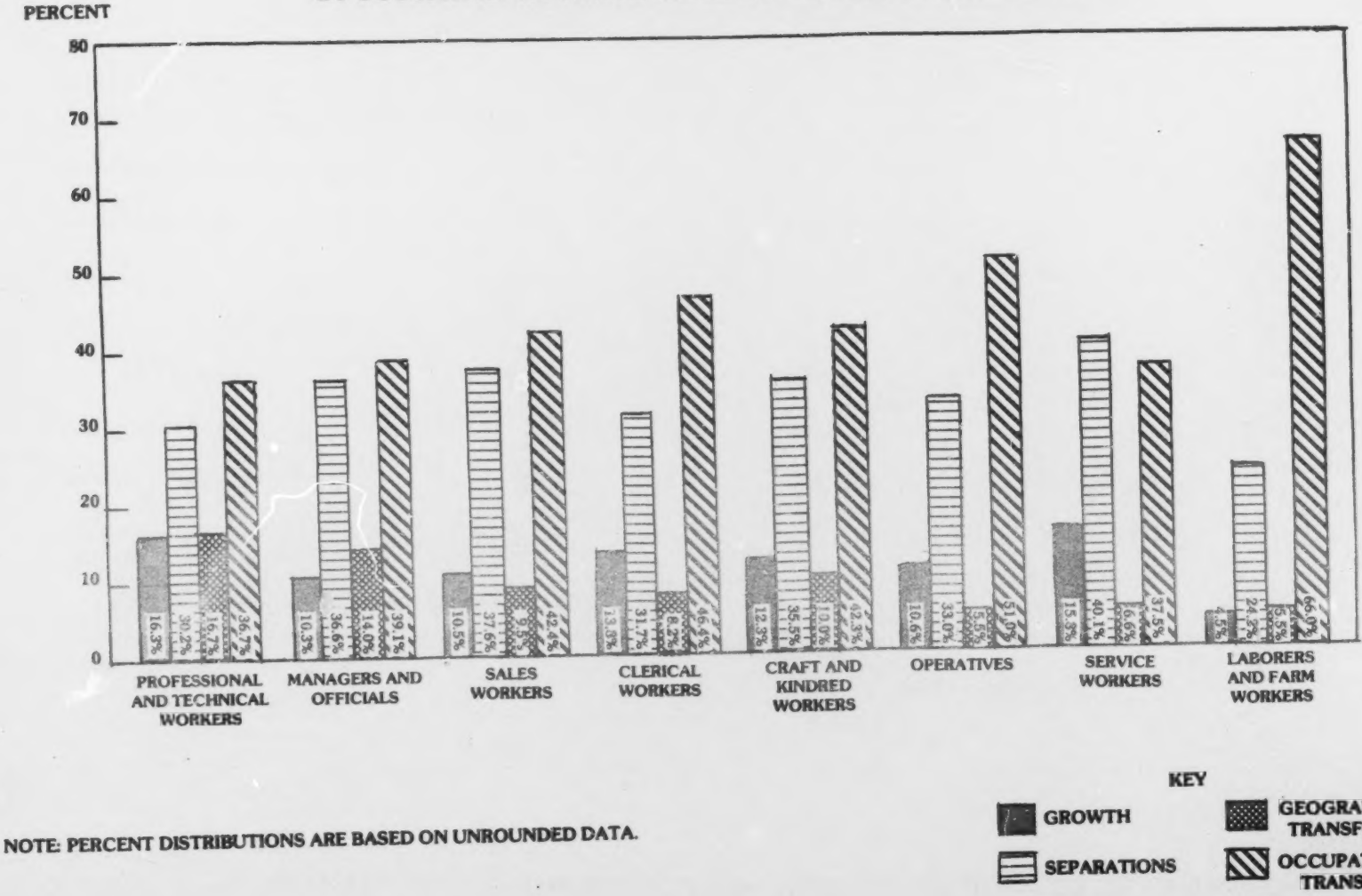
Table 33. PERCENT DISTRIBUTION OF EMPLOYMENT AND ANNUAL AVERAGE JOB OPENINGS
NEW YORK STATE
PROJECTED 1986 AND 1988

(Numbers in thousands)

Occupational group	Percent of total employment		Percent of total annual average openings, 1986-1988	Percent distribution of openings by reason				
	1986	1988		Total	Growth	Separations	Geographic transfers	Occupational transfers
Total, all occupations	100.0	100.0	100.0	100.0	13.1	33.7	10.0	43.2
Professional and technical workers	20.2	20.3	24.1	100.0	16.3	30.2	16.7	36.7
Managers and otficials	9.8	9.7	8.0	100.0	10.3	36.6	14.0	39.1
Sales workers	6.9	6.8	6.2	100.0	10.5	37.6	9.5	42.4
Clerical workers	23.2	23.3	27.0	100.0	13.8	31.7	8.2	46.4
Craft and kindred workers	9.2	9.2	7.2	100.0	12.3	35.5	10.0	42.3
Operatives	9.4	9.3	6.8	100.0	10.6	33.0	5.5	51.0
Service workers	16.3	16.4	18.9	100.0	15.8	40.1	6.6	37.5
Laborers and farm workers	5.0	5.0	1.8	100.0	4.5	24.2	5.5	66.0

NOTE: Detail may not add to totals due to rounding.

Chart 7. DISTRIBUTION OF ANNUAL JOB OPENINGS DUE TO GROWTH, SEPARATIONS AND GEOGRAPHICAL AND OCCUPATIONAL TRANSFERS BY OCCUPATIONAL CLASSIFICATION, NEW YORK STATE, 1986-1988



NOTE: PERCENT DISTRIBUTIONS ARE BASED ON UNROUNDED DATA.

TABLE 34. NEW YORK STATE ANNUAL AVERAGE JOB OPENINGS, BY OCCUPATION

1986-1988

OCCUPATION	EMPLOYMENT (A)				AVERAGE ANNUAL OPENINGS 1986-1988			
	1986	1987	1988	TOTAL	GROWTH (B)	SEPARATIONS (C)	GEOGRAPHIC TRANSFERS (D)	OCCUP. TRANS. (E)
TOTAL, ALL OCCUPATIONS	8,529,054	8,653,380	8,777,829	951,980	124,488	320,540	95,633	411,319
PROFESSIONAL & TECHNICAL WORKERS	1,720,916	1,750,897	1,780,794	184,453	29,985	55,743	30,906	67,819
ENGINEERS	94,110	95,804	97,490	10,296	1,694	2,189	2,398	4,015
AERONAUTICAL ENGINEERS	2,091	2,120	2,148	243	29	33	64	117
CHEMICAL ENGINEERS	2,381	2,415	2,448	278	34	39	72	133
CIVIL ENGINEERS	13,562	13,703	13,844	1,230	141	445	192	452
ELECTRICAL ENGINEERS	26,331	26,956	27,580	2,881	625	423	809	1,024
INDUSTRIAL ENGINEERS	10,730	10,917	11,103	1,007	187	242	240	338
MECHANICAL ENGINEERS	15,152	15,448	15,743	1,560	296	352	294	618
METALLURGISTS & MET ENGINEERS	1,241	1,272	1,302	168	31	29	38	70
OTHER ENGINEERS	22,566	22,915	23,263	2,920	349	624	687	1,260
LIFE & PHYSICAL SCIENTISTS	15,704	15,848	15,988	1,594	144	364	324	762
LIFE SCIENTISTS	5,740	5,791	5,841	638	51	142	133	312
CHEMISTS	5,819	5,847	5,874	477	28	133	94	222
LIFE&PHYSICAL SCIENTISTS,NEC	2,689	2,730	2,772	315	41	63	63	148
MATHEMATICAL SPECIALISTS	4,589	4,654	4,716	465	65	135	117	148
ACTUARIES	1,712	1,702	1,692	140	10-	53	43	54
MATHEMATICAL SCIENTISTS	1,063	1,080	1,095	95	17	17	27	34
STATISTICIANS	1,814	1,872	1,929	230	58	65	47	60
ENGINEERING,SCIENCE TECHNS	87,236	89,138	91,031	10,376	1,903	1,521	1,671	5,281
DRAFTERS & RELATED OCCUPS.	21,980	22,523	23,065	2,605	543	441	405	1,216
ALL ELECTRICAL TECHNICIANS	35,923	36,848	37,773	4,398	925	523	701	2,249
INDUSTRIAL ENGINRING TECHNICIANS	1,088	1,106	1,123	131	18	25	21	67
MECHAN ENGINEERING TECHNICIANS	3,452	3,561	3,669	462	109	68	68	217
SURVEYORS	1,207	1,272	1,337	194	66	26	24	78
ENGIN & SCI TECHNS,NEC	23,407	23,646	23,880	2,567	239	436	449	1,443
MEDICAL WORKERS,EX TECHNS	241,867	246,283	250,701	20,345	4,422	8,384	3,242	4,297
DENTISTS	14,557	15,045	15,532	1,022	488	323	30	181
DIETITIANS &/OR NUTRITIONISTS	6,435	6,585	6,736	738	151	264	86	237
NURSES,PROFESSIONAL	134,158	136,550	138,942	12,250	2,392	5,216	2,048	2,594
OPTOMETRISTS	1,970	2,064	2,158	288	94	164	5	25
PHARMACISTS	11,957	12,051	12,145	1,187	94	817	84	192
PHYSICIANS &/OR SURGEONS	53,301	53,867	54,433	2,769	566	910	862	431
PODIATRISTS	1,155	1,163	1,170	79	8	55	2	14
THERAPISTS	16,614	17,114	17,608	1,781	500	559	122	600
VETERINARIANS	1,700	1,824	1,957	230	129	75	3	23
OTHER HEALTH TECHNOLS & TECHNS	112,370	115,475	118,568	13,389	3,105	4,157	1,817	4,310
HEALTH TECHNOLS & TECHNS	15,857	16,262	16,665	1,694	405	427	274	588
DENTAL HYGIENISTS & ASSTS	20,942	22,068	23,193	3,120	1,126	824	353	817
MEDICAL RECORD LIBRARIANS	1,422	1,455	1,487	186	33	76	23	54
RADIOLOGIC TECHNOLS,TECHNS	8,524	8,648	8,770	714	124	235	87	268
OTHER HEALTH TECHNOLS,TECHNS	58,594	59,735	60,871	6,639	1,141	2,332	956	2,210

TABLE 34. (CONTINUED)

OCCUPATION	EMPLOYMENT (A)				AVERAGE ANNUAL OPENINGS 1986-1988			
	1986	1987	1988	TOTAL	GROWTH (B)	SEPARATIONS (C)	GEOGRAPHIC TRANSFERS (D)	OCCUP. TRANS. (E)
PUBLIC RELATIONS SPECIALISTS	7,031	7,307	7,582	1,036	276	263	124	373
TECHNICIANS,EX HEALTH OR S&E	37,643	38,003	38,360	4,579	360	759	1,256	2,204
AIRPLANE PILOTS	4,588	4,562	4,537	437	26-	47	151	265
AIR TRAFFIC CONTROLLERS	1,661	1,655	1,649	163	6-	18	55	96
FLIGHT ENGINEERS	1,264	1,256	1,249	125	8-	19	41	73
RADIO OPERATORS	1,650	1,744	1,838	297	94	44	58	101
OTHER TECHNS,EX HEALTH OR S&E	27,138	27,407	27,673	3,350	269	587	905	1,589
COMPUTER SPECIALISTS	63,181	64,563	65,944	7,372	1,382	761	1,227	4,002
COMPUTER PROGRAMMERS	33,601	34,297	34,992	3,899	696	425	652	2,126
SYSTEMS ANALYSTS,EDP	29,580	30,266	30,952	3,473	686	336	575	1,876
SOCIAL SCIENTISTS	24,441	25,194	25,943	3,323	753	731	630	1,209
ECONOMISTS & RELATED OCCUPS.	11,359	11,810	12,260	1,573	451	259	296	567
PSYCHOLOGISTS	7,683	7,872	8,061	965	189	201	197	378
URBAN AND REGIONAL PLANNERS	1,372	1,379	1,385	133	7	26	34	66
ALL OTHER SOCIAL SCIENTISTS	3,551	3,653	3,754	604	102	236	91	175
TEACHERS	385,454	390,516	395,572	40,217	5,062	11,835	6,250	17,070
TEACHERS,ADULT EDUCATION	8,761	8,887	9,013	926	126	285	133	382
COLLEGE & UNIVERSITY TEACHERS	102,996	104,322	105,643	10,944	1,326	2,702	1,997	4,919
TEACHERS,ELEMENTARY	141,281	143,163	145,045	16,585	1,882	5,111	1,861	7,731
TEACHERS,SECONDARY	122,058	123,585	125,112	10,438	1,527	3,226	2,101	3,584
TEACHERS,NEC	10,358	10,559	10,759	1,324	201	511	158	454
WRITERS,ARTISTS,ENTERTAINERS	109,162	112,509	115,847	13,433	3,346	3,640	2,144	4,303
ACTORS OR ACTRESSES	8,130	8,321	8,511	1,006	191	208	166	441
ATHLETES & KINDRED WORKERS	5,781	5,770	5,758	552	11-	141	116	306
DANCERS	1,341	1,360	1,379	155	19	37	27	72
DESIGNING OCCUPATIONS	23,488	24,786	26,083	3,433	1,297	823	421	892
EDITORS & REPORTERS	24,455	25,029	25,600	2,962	574	861	652	875
MUSICIANS	14,937	15,151	15,363	1,607	214	545	257	591
PAINTERS & SCULPTORS	22,091	22,916	23,741	2,565	825	777	322	641
PHOTOGRAPHIC OCCUPATIONS	6,155	6,339	6,522	828	184	181	127	336
RADIO, TV ANNOUNCERS & REL. OCCS	2,397	2,449	2,501	285	52	54	49	130
OTH PROFESSIONAL & TECHN WKRS	545,159	552,910	560,634	59,064	7,749	21,267	9,830	20,218
ACCOUNTING OCCUPATIONS	100,888	102,535	104,181	10,445	1,647	3,671	1,846	3,281
ARCHITECTS	5,679	5,772	5,865	679	93	229	109	248
BUYING OCCUPATIONS	38,640	39,184	39,725	4,560	544	1,587	745	1,684
CLERGY	31,747	31,700	31,650	3,142	49-	1,643	840	708
JUDICIAL OCCUPATIONS	3,474	3,474	3,474	507	0	427	38	42
LAWYERS & KINDRED WORKERS	78,680	80,075	81,469	7,952	1,395	4,716	880	961
LIBRARIANS & RELATED WORKERS	12,284	12,441	12,594	1,432	155	505	237	535
PERSONNEL & EMPLOYMENT WKRS	22,764	23,159	23,552	2,474	395	690	394	995
RECREATION WORKERS	13,290	13,574	13,858	2,267	284	422	503	1,058
SOCIAL WORKERS	47,908	48,787	49,663	5,452	879	1,547	586	2,440

TABLE 34. (CONTINUED)

OCCUPATION	EMPLOYMENT (A)				AVERAGE ANNUAL OPENINGS 1986-1988			
	1986	1987	1988	TOTAL	GROWTH (B)	SEPARATIONS (C)	GEOGRAPHIC TRANSFERS (D)	OCCUP. TRANS. (E)
VOCATIONAL & EDUC COUNSELORS	14,079	14,415	14,750	1,629	336	399	274	620
MISC PROFESSIONAL & TECH WKRS	173,694	175,782	177,860	18,323	2,088	5,337	3,339	7,559
MANAGERS & OFFICIALS	832,702	842,642	852,581	95,909	9,940	35,065	13,388	37,516
SALES MANAGERS	24,081	24,361	24,640	3,113	280	714	633	1,486
ADMINISTRATORS,PUB INSPECTORS	38,966	39,126	39,284	3,789	160	1,899	527	1,203
CONSTRUCTION INSPECTORS	3,242	3,247	3,251	360	5	180	45	130
PUBLIC ADM INSPECTORS,EX CONST	11,516	11,501	11,487	855	15-	455	150	265
CHIEF EXECUTIVES,LEGIS.	9,883	9,899	9,915	765	16	392	129	228
POSTMASTERS &/OR MAIL SUPERINTS	1,575	1,568	1,561	172	7-	94	22	63
SCHOOL ADMINS,ELEM & SECONDARY	12,750	12,911	13,070	1,637	161	778	181	517
OTHER MANAGERS,OFFICIALS,PROPS	769,655	779,155	788,657	89,007	9,500	32,452	12,228	34,827
OFFICERS,PILOTS,PURSERS,SHIP	1,288	1,288	1,289	124	0	46	21	57
CONDUCTORS,TRAIN	1,644	1,634	1,624	146	10-	58	26	72
MANAGERS,REST'RANT,COFFEE SH,ETC	34,156	33,997	33,838	3,509	159-	1,322	306	2,040
OTHER MANAGERS, ADMINISTRATORS	732,567	742,236	751,906	85,228	9,669	31,026	11,875	32,658
SALES WORKERS	585,550	593,083	600,927	73,618	7,691	27,732	7,009	31,186
INSURANCE AGENTS,BROKERS,ETC	38,421	38,552	38,684	3,923	131	1,403	462	1,927
REAL ESTATE AGENTS,BROKERS	34,655	34,607	34,556	3,995	49-	2,345	347	1,352
STOCK & BOND SALES AGENTS	49,945	51,642	53,656	7,067	1,856	2,009	582	2,620
MISC SALES WORKERS	462,529	468,282	474,031	58,633	5,753	21,975	5,618	25,287
CLERICAL WORKERS	1,981,659	2,015,254	2,048,819	244,079	33,595	77,308	19,947	113,229
STENOS,SECRETARIES,& TYPISTS	446,034	455,307	464,579	46,259	9,273	19,331	3,948	13,707
SECRETARIES	291,389	297,945	304,500	29,676	6,556	12,990	3,277	6,853
STENOGRAPHERS	28,589	28,926	29,263	2,990	337	1,293	29	1,331
TYPISTS	126,056	128,436	130,816	13,593	2,380	5,048	642	5,523
OFFICE MACHINE OPERATORS	92,608	94,677	96,741	11,511	2,069	2,493	1,671	5,278
ALL OFFICE MACHINE OPERATORS	18,515	18,799	19,081	2,430	284	642	376	1,128
COMPUTER,PERIPHERAL EQUIP OPS	32,988	33,769	34,548	3,895	781	412	676	2,026
DUPLICATING MACHINE OPERATORS	4,420	4,605	4,790	720	185	167	92	276
KEYPUNCH OPERATORS	21,900	22,342	22,783	2,269	442	666	223	938
ALL OTHER OFFICE MACHINE OPS	14,750	15,128	15,505	2,194	378	605	303	908
OTHER CLERICAL WORKERS	1,443,017	1,465,270	1,487,499	186,309	22,253	55,484	14,328	94,244
BANK TELLERS	48,535	49,237	49,937	5,770	702	1,473	493	3,102
BOOKKEEPERS	160,575	163,221	165,867	16,896	2,646	7,394	1,633	5,223
CASHIERS	137,140	139,080	141,019	15,834	1,940	5,132	834	7,928
ELIGIBILITY WORKERS,WELFARE	2,287	2,294	2,300	381	7	140	25	209
CLERICAL SUPERVISORS	59,901	60,741	61,580	6,962	840	2,296	850	2,976
COLLECTORS	8,181	8,291	8,400	1,312	110	357	91	754
COUNTER CLERKS,EX FOOD	37,785	38,547	39,306	5,058	762	1,598	501	2,197
DISPATCHERS,STARTERS,VEHICLE	10,159	10,295	10,429	1,560	136	375	113	936
SURVEY WORKERS	5,987	6,322	6,656	1,201	335	221	70	575
ESTIMATORS,INVESTIGATORS,NEC	18,787	18,909	19,034	2,180	122	678	189	1,191

TABLE 34. (CONTINUED)

OCCUPATION	EMPLOYMENT (A)				AVERAGE ANNUAL OPENINGS 1986-1988			
	1986	1987	1988	TOTAL	GROWTH (B)	SEPARATIONS (C)	GEOGRAPHIC TRANSFERS (D)	OCCUP. TRANS. (E)
PRODUCTION CLERKS	16,955	17,363	17,770	2,057	408	486	191	972
FILE CLERKS & RELATED WORKERS	42,204	43,004	43,802	4,925	800	1,759	517	1,849
CLAIM WORKERS,INSURANCE	13,929	13,923	13,918	1,923	6-	509	153	1,267
LIBRARY ASSISTANTS	13,205	13,335	13,465	2,357	130	467	440	1,320
POSTAL MAIL CARRIERS	50,939	50,717	50,496	3,226	222-	1,014	456	1,978
MAIL HANDLERS,EX POSTAL SERV	12,579	12,916	13,253	2,267	337	613	142	1,175
MESSENGERS & OFFICER HELPERS	13,000	13,395	13,789	2,480	395	1,428	67	590
METER READERS	2,953	2,960	2,967	379	7	70	33	269
PAYROLL/TIMEKEEPING CLERKS	16,936	17,285	17,633	1,947	349	681	156	761
POSTAL SERVICE CLERKS	7,411	7,379	7,347	476	32-	198	30	280
PROOFREADERS	2,315	2,326	2,336	380	11	131	26	212
RECEPTIONISTS & RELATED WKRS	53,277	54,657	56,036	6,518	1,380	2,350	328	2,460
SHIPPING,RECEIVING OCCUPS	72,445	73,154	73,860	7,154	709	2,348	513	3,584
STATISTICAL CLERKS & RELATED OCC	29,577	30,478	31,381	3,911	901	1,181	183	1,646
STOCK CLERKS,STORE KEEPERS	76,674	77,807	78,940	9,085	1,133	2,350	778	4,824
TEACHERS AIDES/EDUC ASSISTANTS	42,134	43,093	44,051	4,725	959	1,138	129	2,499
TELEGRAPH OPERATORS	1,292	1,274	1,256	161	18-	49	14	116
TELEPHONE OPERATORS	26,817	26,966	27,116	2,460	149	1,151	243	917
TICKET,STATION,EXPRESS AGENTS	12,568	12,501	12,435	1,533	67-	324	138	1,138
WEIGHERS,RECORD KEEPING	1,167	1,170	1,173	168	3	46	13	106
ALL OTHER CLERICAL WORKERS	445,303	452,630	459,947	71,023	7,327	17,527	4,979	41,190
CRAFT & KINDRED WORKERS	788,257	797,209	806,126	73,250	8,952	25,967	7,346	30,985
CONTRUCTION CRAFTS WORKERS	201,898	205,083	208,259	18,145	3,185	6,772	1,875	6,313
CARPENTERS & RELATED OCCUPS.	62,237	63,098	63,956	5,422	861	2,165	504	1,892
BRICKMASONS & STONEMASONS	6,562	6,741	6,919	669	179	200	40	250
CEMENT MASONS & RELATED WORKERS	5,898	6,034	6,168	459	136	153	43	127
ELECTRICIANS & RELATED WORKERS	45,635	47,004	48,372	4,923	1,369	1,392	705	1,457
EXCAVATING,GRADING MACH OPS	17,666	17,796	17,923	1,281	130	439	71	641
FLOOR SANDING MACHINE OPERATORS	1,107	1,069	1,031	45	38-	38	3	42
PAINTERS,MAINTENANCE	20,679	20,643	20,608	1,643	36-	935	145	599
PAPERHANGERS	1,929	1,877	1,825	137	52-	110	6	73
PLUMBERS, PIPEFITTERS & REL. OCC	27,030	27,536	28,042	2,393	506	978	193	716
ROOFERS	5,610	5,575	5,540	406	35-	129	100	212
STRUCTURAL STEEL WORKERS	3,398	3,468	3,538	353	70	92	52	139
TILE INSTALLING OCCUPS	3,258	3,343	3,427	328	85	103	10	130
BLUE COLLAR WORKER SUPVSRS	73,309	73,912	74,514	6,966	603	2,372	665	3,326
METAL WKG CRAFTS WKRS,EX MECH	45,741	46,526	47,304	4,687	785	1,417	405	2,080
BOILERMAKERS	1,183	1,207	1,231	118	24	40	6	48
HEAT TREATERS,ANNEALERS,ETC	1,084	1,091	1,098	97	7	41	5	44
JOB & DIE SETTERS,METAL	6,197	6,331	6,463	546	134	172	43	197
MACHINING OCCUPATIONS	12,123	12,322	12,521	1,549	199	401	136	813
MILLWRIGHTS	3,852	3,889	3,925	369	37	114	39	179

TABLE 34. (CONTINUED)

OCCUPATION	EMPLOYMENT (A)				AVERAGE ANNUAL OPENINGS 1986-1988			
	1986	1987	1988	TOTAL	GROWTH (B)	SEPARATIONS (C)	GEOGRAPHIC TRANSFERS (D)	OCCUP. TRANS. (E)
MOLDERS,METAL	1,175	1,202	1,225	111	27	30	6	48
SHEET METAL WORKERS	10,053	10,231	10,409	972	178	273	102	419
TOOLMAKERS, DIEMAKERS & REL. OCC	8,397	8,581	8,764	795	184	285	60	266
MECHS,REPAIRERS,INSTALLERS	180,616	182,346	184,059	16,132	1,730	4,452	1,985	7,965
REFRIG MECHANICS,A/C MECHANICS	13,653	13,841	14,029	1,126	188	329	180	429
AIRCRAFT MECHANICS	8,053	8,017	7,981	600	36-	123	128	385
AUTO BODY REPAIRERS	8,073	8,195	8,317	858	122	130	98	508
AUTOMOTIVE MECHANICS & RELATED W	61,484	61,842	62,199	4,532	358	1,391	557	2,226
FARM EQUIPMENT MECHANICS	1,778	1,815	1,851	213	37	41	22	113
EQUIPMENT MECHS & REPAIRERS	27,674	28,025	28,371	2,277	351	806	336	784
HOUSEHOLD APPL MECHS & INST	4,446	4,493	4,536	363	47	122	32	162
OFF MACH SERVICERS/CASH REG SERV	7,167	7,314	7,460	842	147	154	88	453
RADIO & TV SERVICERS & REPAIRERS	4,722	4,839	4,955	488	117	110	29	232
RAILROAD CAR SHOP WORKERS	1,540	1,530	1,521	80	10-	42	6	42
OTH MECHANICS,REPAIRERS,INST	41,168	41,560	41,946	4,661	392	1,194	498	2,577
PRINTING TRADE CRAFTS WKRS	48,533	48,754	48,979	4,164	221	1,527	392	2,024
BOOKBINDING OCCUPATIONS	12,402	12,439	12,477	1,248	37	402	124	685
COMPOSITORS &/OR TYPESETTERS	10,765	10,850	10,935	1,130	85	437	87	521
ENGRAVERS,EXC PHOTOENGRAVERS	1,045	1,063	1,081	125	18	38	11	58
PHOTOENGRAVERS,LITHOGRAPHERS	5,893	5,879	5,865	529	14-	161	59	323
PRESS & PLATE PRINTERS	18,141	18,234	18,330	1,098	93	476	108	421
TRANS,PUB UTIL CRAFTS WKRS	32,494	32,232	31,978	1,728	262-	558	125	1,307
ELEC POWER LINE INST,REPAIRS	12,358	12,457	12,557	847	99	188	49	511
LOCOMOTIVE ENGINEER OCCUPS	2,230	2,215	2,202	188	15-	115	7	81
SWITCHBOARD OPS,GENERATING PLANT	1,370	1,372	1,374	128	2	71	4	51
TELEPHONE INSTALLERS,REPAIRS	16,305	15,958	15,616	554	347-	182	64	655
OTHER CRAFTS,KINDRED WORKERS	205,666	208,356	211,033	21,428	2,690	8,869	1,899	7,970
BAKING OCCUPATIONS	6,160	6,197	6,234	492	37	232	37	186
CABINETMAKERS	4,861	4,903	4,945	518	42	240	25	211
CARPET CUTTERS,CARPET LAYERS	4,164	4,204	4,244	302	40	64	38	160
CRANE,DERRICK,HOIST OCCUPS	3,816	3,823	3,829	299	7	112	19	161
MERCHAN DISPLAYERS & WIND TRMRS	1,931	1,921	1,911	202	10-	78	42	92
DENTAL LAB TECHNICIANS	5,025	5,374	5,722	808	349	207	48	204
FURNITURE FINISHERS	1,643	1,654	1,665	172	11	83	15	63
GLAZING OCCUPATIONS	1,960	2,002	2,043	197	42	61	18	76
OTHER INSPECTION OCCUPS	28,884	29,466	30,047	3,388	582	1,126	295	1,385
JEWELERS, WATCHMAKERS & REL. OCC	6,138	6,329	6,517	817	191	328	57	241
MOTION PICTURE PROJECTIONISTS	2,154	2,216	2,278	420	62	254	20	84
OPTICIANS,LENS GRINDRS,POLISH	5,489	5,674	5,858	680	185	229	51	215
SHOE REPAIRING OCCUPATIONS	1,458	1,492	1,525	249	34	146	13	56
STATIONARY ENGINEERING OCCUPS	13,282	13,345	13,404	1,329	63	613	201	452
TAILORS	8,923	9,002	9,081	913	79	609	18	207

TABLE 34. (CONTINUED)

OCCUPATION	EMPLOYMENT (A)				AVERAGE ANNUAL OPENINGS 1986-1988			
	1986	1987	1988	TOTAL	GROWTH (B)	SEPARATIONS (C)	GEOGRAPHIC TRANSFERS (D)	OCCUP. TRANS. (E)
UPHOLSTERING OCCUPATIONS	3,774	3,788	3,803	405	14	242	38	111
CRAFTS & KINDRED WORKERS,NEC	105,356	106,325	107,291	10,182	969	4,213	958	4,042
OPERATIVES	800,797	809,278	817,756	80,024	8,481	26,363	4,387	40,793
OPERATIVES,EX TRANSPORTATION	503,641	509,490	515,344	50,667	5,849	17,849	2,965	24,004
SEMISKILLED METALWORKING OPS	79,436	80,916	82,386	7,296	1,480	2,220	416	3,180
DRILL PRESS OPERATIVES	7,270	7,417	7,563	823	147	231	104	341
FURNACE TNDRS,SMELTERS,POURERS	1,489	1,484	1,483	96	5-	37	15	49
GRINDING/ABRADING MACH OPS,METAL	7,148	7,277	7,406	660	129	218	80	233
LATHE,MILLING MACH OPERATIVES	14,053	14,300	14,543	1,320	247	415	43	615
METAL PLATERS	3,287	3,362	3,436	320	75	89	11	145
OTHER PRECISION MACH OPS	16,573	16,914	17,251	1,544	341	425	51	727
POWER PRESS OPERATIVES	10,199	10,428	10,654	1,032	229	334	31	438
WELDERS & FLAME CUTTERS	19,178	19,491	19,803	1,475	313	460	78	624
SEMISKILLED TEXTILE OPERATIVES	8,776	8,878	8,985	1,119	102	354	100	563
KNITTERS,LOOPERS,& TOPPERS	2,588	2,696	2,801	415	108	94	37	176
SPINNERS,TWISTERS,& WINDERS	1,495	1,514	1,531	175	19	75	0	81
OTHER TEXTILE OCCUPATIONS	4,041	4,023	4,013	457	18-	157	54	264
SEMISKLD PACKNG,INSPECTNG OPS	54,509	55,228	55,946	5,227	719	1,918	276	2,314
PACKERS,WRAPPERS,EX MEAT & PROD	53,459	54,205	54,951	5,174	746	1,881	271	2,276
OTHER OPERATIVES,EX TRANSPORT	360,920	364,468	368,027	37,025	3,548	13,357	2,173	17,947
ASBESTOS & INSULATION WORKERS	3,503	3,594	3,685	432	91	71	22	248
ASSEMBLERS & RELATED WORKERS	93,528	95,589	97,644	10,213	2,061	2,991	478	4,683
CLOTHING IRONERS & PRESSERS	16,675	16,891	17,107	1,689	216	762	86	625
CUTTING OPERATIVES,NEC	9,532	9,494	9,460	799	38-	352	86	399
SEWERS,CUSTOM	2,871	2,817	2,763	265	54-	186	37	96
DRY WALL INSTALLERS,LATHERS	5,381	5,530	5,678	669	149	105	33	382
FILERS,POLISHRS,SANDRS,BUFFRS	8,694	8,868	9,039	983	174	294	62	453
GARAGE WORKERS,GAS STAT ATTNS	22,570	22,598	22,626	2,930	28	552	248	2,102
LAUNDRY,DRYCLEANING OPS,NEC	13,341	13,737	14,127	1,632	396	618	27	591
MINE OPERATIVES,NEC	1,077	1,102	1,116	135	25	29	6	75
MIXING OPERATIVES	2,548	2,536	2,530	249	12-	73	14	174
OILERS	1,785	1,797	1,809	215	12	68	11	124
PAINTERS,MFG ARTICLES	7,958	8,098	8,236	794	140	209	80	365
OTHER PHOTO PROCESS WORKERS	9,315	9,763	10,210	1,236	448	262	49	477
RIVETERS & FASTENERS	1,665	1,686	1,706	203	21	56	10	116
SAILORS & DECKHANDS	3,610	3,644	3,676	314	34	116	18	146
SAWYERS	2,665	2,701	2,729	372	36	100	25	211
SEWERS & STITCHERS	73,714	73,131	72,548	5,006	583-	3,906	438	1,245
SHOEMAKING MACHINE OPS	2,272	2,155	2,056	141	117-	103	7	148
FURNACE TNDRS,STOKRS,EX METAL	4,025	4,045	4,065	352	20	158	44	130
WINDING OPERATIVES,NEC	3,217	3,301	3,387	413	84	86	16	227
MISC MACH OPS,MEAT & DAIRY	2,427	2,427	2,426	252	0	74	10	168

TABLE 34. (CONTINUED)

OCCUPATION	EMPLOYMENT (A)				AVERAGE ANNUAL OPENINGS 1986-1988			
	1986	1987	1988	TOTAL	GROWTH (B)	SEPARATIONS (C)	GEOGRAPHIC TRANSFERS (D)	OCCUP. TRANS. (E)
MISC MACH OPS,ALL OTH FOOD	2,968	2,961	2,954	298	7-	89	12	204
MISC MACH OPS,TEXTILE MILL	1,187	1,205	1,223	143	18	36	5	84
MISC MACH OPS,LUMBER PROD	1,781	1,794	1,804	199	13	55	9	122
MISC MACH OPS,PAPER,ALLIED	7,590	7,498	7,422	687	92-	227	37	515
MISC MACH OPS,CHEM,ALLIED	5,042	5,015	4,989	493	27-	151	23	346
MISC MACH OPS,RUBBER,PLAST	11,842	12,322	12,788	1,762	480	373	60	849
MISC MACH OPS,LEATHER,LEA GD	1,252	1,186	1,129	57	66-	35	5	83
MISC MACH OPS,STONE,CLAY,GLA	1,560	1,557	1,558	157	3-	48	5	107
MISC MACH OPS,PRIMARY METALS	3,755	3,710	3,676	340	45-	112	18	255
MISC MACH OPS,MFG,NEC	5,329	5,383	5,431	611	54	162	25	370
MISC MACH OPS,NONMFG	2,166	2,175	2,184	237	9	65	12	151
OPERATIVES,NEC,DURABLE GOODS	6,396	6,516	6,635	830	120	221	37	452
OPERATIVES,NEC,NONDUR GOODS	13,219	13,131	13,054	1,367	88-	477	74	904
OPERATIVE,NEC,NONMFG	1,214	1,282	1,347	206	68	42	8	88
TRANSPORT EQUIP OPERATIVES	232,207	234,426	236,638	21,826	2,219	6,298	1,0[illegible]	12,279
BUS DRIVERS	47,851	48,641	49,431	4,681	790	1,362	146	2,383
STREETCAR OPERATORS	3,180	3,186	3,192	186	6	65	10	105
DELIVERY & ROUTE WORKERS, ETC.	57,803	58,376	58,947	5,588	573	1,454	292	3,269
FORK LIFT,TOW MOTOR OPS	17,323	17,417	17,509	1,815	94	345	35	1,341
PARKING LOT ATTENDANTS	6,898	7,084	7,270	744	186	303	21	234
BRAKERS,TRAIN	3,308	3,287	3,267	180	21-	83	10	108
TAXICAB DRIVERS, CHAUFFERS & REL	20,976	20,918	20,859	1,659	58-	963	63	691
TRUCK DRIVING OCCUPATIONS	74,623	75,272	75,919	6,957	649	1,716	452	4,140
ALL OTHER OPS & SEMISKILLED WKRS	64,949	65,362	65,774	7,531	413	2,216	392	4,510
SERVICE WORKERS	1,388,795	1,412,367	1,435,921	149,760	23,572	60,087	9,891	56,210
CLEANING SERVICE WORKERS	285,113	291,750	298,387	37,912	6,637	15,521	1,750	14,004
JANITORS,PORTERS,& CLEANERS	285,113	291,750	298,387	37,912	6,637	15,521	1,750	14,004
FOOD SERVICE WORKERS	439,931	444,612	449,287	47,457	4,681	17,453	3,135	22,188
BAKERS,BREAD &/OR PASTRY	2,311	2,326	2,341	186	15	87	14	70
BARTENDERS	26,377	26,598	26,819	2,857	221	1,279	133	1,224
DINING RM ATTNS,BAR HELPERS,ETC	18,209	18,476	18,743	1,777	267	272	92	1,146
COOKS,EX PRIVATE	57,119	57,771	58,421	5,963	652	2,306	463	2,542
BUTCHERS &/OR MEAT CUTTERS	16,426	16,576	16,725	1,390	150	660	116	464
WAITERS, WAITRESSES, ETC.	115,776	117,005	118,233	10,717	1,229	4,223	1,287	3,978
FOOD WORKERS,NEC,EX PRIVATE	203,713	205,860	208,005	24,567	2,147	8,626	1,030	12,764
HEALTH SERVICE WORKERS	128,845	131,980	135,111	12,957	3,135	4,779	927	4,116
NURSING ASSISTANT OCCUPS	127,857	130,973	134,086	12,833	3,116	4,741	916	4,060
PERSONAL SERVICE WORKERS	135,636	138,539	141,432	14,637	2,903	6,164	1,489	4,081
FLIGHT ATTENDANTS	7,828	7,775	7,722	666	53-	307	140	272
ATTNS,RECREATION & AMUSEMENT	11,799	11,899	11,996	1,343	100	576	119	548
ATTNS,PERSONAL SERVICE,NEC	23,077	23,687	24,294	2,971	610	1,342	356	663
BELLHOPS, BAGGAGE PORTERS, ETC.	2,785	2,870	2,955	349	85	112	52	100

TABLE 34. (CONTINUED)

OCCUPATION	EMPLOYMENT (A)				AVERAGE ANNUAL OPENINGS 1986-1988			
	1986	1987	1988	TOTAL	GROWTH (B)	SEPARATIONS (C)	GEOGRAPHIC TRANSFERS (D)	OCCUP. TRANS. (E)
BARBERS	8,227	8,255	8,283	781	28	571	25	157
CHILD CARE WORKERS,EX PRIVATE	21,656	22,492	23,326	2,674	836	940	89	809
ELEVATOR OPERATORS	3,828	3,848	3,867	448	20	297	35	96
HAIRDRESSERS,COSMETOLOGISTS	35,930	36,609	37,287	3,044	679	1,376	293	696
USHERS,LOBBY ATTNS,TICKET TAKERS	5,268	5,387	5,506	534	119	129	97	189
SOCIAL SERVICE AIDES	14,810	15,285	15,759	1,771	475	486	275	535
PROTECTIVE SERVICE WORKERS	210,943	214,587	218,231	19,970	3,644	9,149	1,403	5,774
CROSSING GUARDS,BRIDGETENDRS	4,039	4,046	4,053	387	7	247	28	105
FIREFIGHTING OCCUPATIONS	20,431	20,468	20,505	765	37	298	122	308
GUARDS AND REL. OCCS.	117,719	121,068	124,420	15,087	3,349	7,742	847	3,149
POLICE & DETECTIVES	67,319	67,568	67,815	3,613	249	797	406	2,161
SHERIFFS & BAILIFFS	1,305	1,308	1,309	101	3	56	0	42
PRIVATE HOUSEHOLD WORKERS	80,783	80,690	80,600	8,608	93-	5,323	416	2,962
CHILD CARE WKRS,PVT HSHLD	33,862	33,822	33,782	3,511	40-	1,860	135	1,556
COOKS, PVT HSHLD	1,521	1,519	1,518	189	2-	136	9	46
HOUSEKEEPERS, PVT HSHLD	8,243	8,233	8,223	906	10-	620	49	247
MAIDS,SERVANTS,PVT HSHLD	36,986	36,947	36,909	3,981	39-	2,690	222	1,108
OTHER SERVICE WORKERS	107,544	110,209	112,873	8,219	2,665	1,698	771	3,085
LABORERS, EX. FARM	356,595	361,330	366,047	44,665	4,735	9,610	2,340	27,980
ANIMAL CARETAKERS	5,851	6,020	6,188	916	169	247	24	476
CONST LABRS,EX CARPEN HLPRS	20,579	20,712	20,839	2,359	133	506	145	1,575
FREIGHT,MATERIAL HANDLERS	4,915	4,945	4,970	430	30	114	39	247
REFUSE COLLECTORS	12,546	12,589	12,631	754	43	208	50	453
GARDENERS & GROUNDSKEEPERS, ETC.	34,481	35,042	35,603	3,910	561	1,948	140	1,261
STOCK HANDLERS	85,719	86,977	88,233	12,627	1,258	1,453	1,131	8,785
VEHICLE WASHERS,EQUIP CLNRS	7,942	8,012	8,081	756	70	214	64	408
OTHER LABORERS	184,009	186,489	188,966	22,864	2,480	4,908	745	14,731
FARM WORKERS	73,783	71,320	68,858	6,222	2,463-	2,665	419	5,601
FARMERS & FARM MANAGERS	2,933	2,832	2,731	161	101-	132	8	122
FARM LABORERS & SUPERVISORS	70,850	68,488	66,127	6,061	2,362-	2,533	411	5,479
FARM SUPERVISORS	2,293	2,222	2,152	188	71-	68	13	178
FARM LABORERS	68,557	66,266	63,975	5,873	2,291-	2,465	398	5,301

A. These employment figures are based on nonagricultural wage and salary data. Also included in total employment are estimates for self-employed, unpaid family, private household and agricultural workers. Total derived from detailed occupations may not add to figures shown due to rounding. Figures for 1987 are simple linear interpolations of 1986 and 1988 data, and should not be interpreted as representing cyclical fluctuations in the economy.

B. Change in employment 1986-1988 divided by 2 for detailed occupations only.

C. Openings resulting from persons leaving the occupation for various reasons including retirement, death, family responsibility, etc.

D. Openings resulting from the movement of workers from one geographic area to another area.

E. Openings resulting from the movement of workers out of the given occupation to another occupation. Occup. Trans. is the abbreviation for occupational transfers.

NOTE: Occupations with fewer than 1,000 employment in 1980 were not printed. Also, figures are presented in units and thus imply a level of accuracy far beyond the estimating and projection techniques. Therefore, such numbers are to be regarded as approximations. The figures should be used as indicators of relative employment levels and growth.

Long-Range National Occupational Outlook

The most recent occupational projections by the Bureau of Labor Statistics suggest that a wide range of job skills will be needed nationwide by 1995. Employment in jobs requiring a college education or specialized post-secondary technical training are expected to increase significantly between 1982 and 1995. However, many jobs that do not require post-secondary training are also expected to expand significantly. For example, the projected rapid increase in demand for medical services will require large numbers of nursing aides and orderlies in addition to highly trained medical practitioners.

Employment growth in many occupations will be affected by technological change through the mid-1990's. For example, word processing equipment will slow the growth of typists, and industrial robots will reduce the growth in employment of welders, production painters and material moving occupations. Despite technological advances, employment will continue to advance in most traditional fields from 1982 to 1995. More workers will be needed to drive trucks to deliver goods, to clean a growing number of buildings, to perform health and personal services, to provide police and fire protection for an increasing population and to maintain and repair a large stock of automobiles, appliances and factory equipment.

Following is a brief summary of projected trends in the nation by selected occupational group:

- Health-related occupations: Health care will continue to expand during the 1982-1995 period. Occupations in this field have been among the fastest growing for many years, even from 1978-1982 when total employment was virtually unchanged. Continued population growth, expansion of health care coverage, and the fact that the aged (who require the most health care) are expected to increase their share of the total U.S. population are all factors that will cause greater demand for registered nurses (49 percent or 642,000 jobs); physicians (34 percent or 163,000 jobs); nursing aides and orderlies (423,000 jobs); and licensed practical nurses (220,000 jobs). In addition, some smaller occupations such as physical therapy technicians (68 percent), occupational therapists (60 percent), physical therapists (54 percent), and medical assistants (47 percent) will also grow from 1982 to 1995.

- Computer-related occupations: Occupations that are directly related to computer development and use will be among the leaders in employment growth rates from 1982 to 1995. The number of systems analysts and computer programmers should expand at a very rapid rate. An increased demand will also occur for computer service technicians to maintain the equipment, and computer and peripheral equipment operators.

- Education-related occupations: Because of an increase in births and the expected continued growth in the labor force participation of mothers of young children, employment of preschool teachers is expected to surge during the 1982-1995 period increasing by more than 40 percent. Kindergarten and elementary

school teachers as well as teachers' aides are anticipated to grow substantially as growth in t. youth population works its way through the educational system. Vocational education teachers can be expected to grow at a strong pace due to demand for job training and retraining programs.

- Scientific and technical occupations: Engineering occupations are expected to provide nearly 600,000 new jobs by 1995. Chemists will be affected by diminished growth in the chemicals industry, and geologists and geophysists by a slowdown in oil and gas extraction. A fairly strong demand for biological scientists is expected due to growth in the drug industry. Electrical and electronic technicians, mechanical and civil engineering technicians should experience strong growth. As computer-assisted design equipment gains more widespread use, drafting occupations will be adversely affected.

- Office clerical workers: Because of office automation, most clerical occupations are expected to grow more slowly between 1982 and 1995 than in the 1970's. Some exceptions should occur: receptionists will be among the fastest growing clerical occupations, with a projected increase of 49 percent. Despite their increasing use of advanced office equipment and resultant rise in productivity, secretaries are projected to grow at a rate that is above average because of the growth industries in which they are concentrated.

- Mechanics and repairers: Increasing complexity of equipment used by industry and consumers is expected to provide continued steady growth for mechanics and repairers, especially automotive mechanics; refrigeration and air-conditioning mechanics; office machine and cash register servicers.

- Construction trades: Fluctuations caused by cyclical and seasonal factors characterize the construction industry. Although employment among construction trades is projected to increase by more than 900,000 workers, much of this growth represents a recovery from the severe downturn of the early 1980's.

- Food and beverage service occupations: The trend toward eating outside the home will result in continued employment growth among food and beverage preparation and service occupations. Much of this growth should be in fast food establishments.

- Production occupations: The recovery of manufacturing from the recent recession and its projected national employment increase by 1995 will provide many additional jobs for production workers performing precision tasks. Some of the lesser skilled production occupations (such as operatives) are threatened by the introduction of robots and other automated equipment.

- Sales occupations: Security and bond sales agents and real estate agents should grow faster than average as do their related industries. Salesclerks should increase about average following the trend in retail trade where most are employed. However, because of the very large size of this occupation, it should be among the leaders in the number of jobs added during the 1982-1995 period.

The U.S. economy is expected to generate an additional 25.6 million jobs between 1982 and 1995. About one-half of this job growth is projected to occur in only 40 of the 1,700 occupations for which projections were developed. In general, these occupations are numerically large and all had more than 250,000 workers in 1982. Several of the occupations on the list reflect recovery from very low 1982 employment levels caused by the recession. For example, helpers, trade; supervisors of blue-collar workers; and carpenters are on the list only because of the sharp drop in employment experienced from 1979 to 1982. Most of the employment growth reflects recovery to prerecessionary levels. The following table shows those 40 occupations with the largest anticipated job growth from 1982 to 1995:

Table 35. OCCUPATIONS WITH THE LARGEST PROJECTED JOB GROWTH
UNITED STATES
1982 - 1995

Occupation	Change in total employment (000's)	Percent of total job growth	Percent change
Building custodians	779	3.0	27.5
Cashiers	744	2.9	47.4
Secretaries	719	2.8	29.5
General clerks, office	696	2.7	29.6
Salesclerks	685	2.7	23.5
Nurses, registered	642	2.5	48.9
Waiters and waitresses	562	2.2	33.8
Teachers, kindergarten and elementary	511	2.0	37.4
Truckdrivers	425	1.7	26.5
Nursing aides and orderlies	423	1.7	34.8
Sales representatives, technical	386	1.5	29.3
Accountants and auditors	344	1.3	40.2
Automotive mechanics	324	1.3	38.3
Supervisors of blue-collar workers	319	1.2	26.6
Kitchen helpers	305	1.2	35.9
Guards and doorkeepers	300	1.2	47.3
Food preparation and service workers, fast food restaurants	297	1.2	36.7
Managers, store	292	1.1	30.1
Carpenters	247	1.0	28.6
Electrical and electronic technicians	222	0.9	60.7
Licensed practical nurses	220	0.9	37.1

Table 35. (continued)

Occupation	Change in total employment (000's)	Percent of total job growth	Percent change
Computer systems analysts	217	0.8	85.3
Electrical engineers	209	0.8	65.3
Computer programmers	205	0.8	76.9
Maintenance repairers, general utility	193	0.8	27.8
Helpers, trades	190	0.7	31.2
Receptionists	189	0.7	48.8
Electricians	173	0.7	31.8
Physicians	163	0.7	34.0
Clerical supervisors	162	0.6	34.6
Computer operators	160	0.6	75.8
Sales representatives, nontechnical	160	0.6	27.4
Lawyers	159	0.6	34.3
Stock clerks, stockroom and warehouse	156	0.6	18.8
Typists	155	0.6	15.7
Delivery and route workers	153	0.6	19.2
Bookkeepers, hand	152	0.6	15.9
Cooks, restaurants	149	0.6	42.3
Bank tellers	142	0.6	30.0
Cooks, short order, specialty and fast food	141	0.6	32.2

NOTE: Includes only detailed occupations with 1982 employment of 25,000 or more.

SOURCE: U.S. Department of Labor, Bureau of Labor Statistics, Monthly Labor Review, November 1983.

A list of the occupations expected to grow the fastest from 1982 to 1995 is shown in Table 36. Although the list is dominated by occupations that are tied to continued growth of expanding industries, and which have been among the strongest in the economy for the past decade, many reflect recovery from the recession. Also, these fast growing occupations generally are not found on the list of occupations that will add the most jobs over the period. Almost half of the 20 occupations on the list are either in the computer or health fields, which are among the fields with the strongest growth.

Table 36. ANTICIPATED FASTEST GROWING OCCUPATIONS
UNITED STATES
1982 - 1995

Occupation	Percent growth in employment
Computer service technicians	96.8
Legal assistants	94.3
Computer systems analysts	85.3
Computer programmers	76.9
Computer operators	75.8
Office machine repairers	71.7
Physical therapy assistants	67.8
Electrical engineers	65.3
Civil engineering technicians	63.9
Peripheral EDP equipment operators	63.5
Insurance clerks, medical	62.2
Electrical and electronic technicians	60.7
Occupational therapists	59.8
Surveyor helpers	58.6
Credit clerks, banking and insurance	54.1
Physical therapists	53.6
Employment interviewers	52.5
Mechanical engineers	52.1
Mechanical engineering technicians	51.6
Compression and injection mold machine operators, plastics	50.3

NOTE: Includes only detailed occupations with 1982 employment of 25,000 or more.

SOURCE: U.S. Department of Labor, Bureau of Labor Statistics, Monthly Labor Review, November 1983.

Some occupations are expected to decline over the period. In general, occupations on the list are concentrated in national industries that are contracting, or severely affected by technological change. For example, railroad conductors are concentrated in a declining industry, while data entry operators are affected by technological change. (See Table 37.)

Table 37. PROJECTED RAPIDLY DECLINING OCCUPATIONS
UNITED STATES
1982 - 1995

Occupation	Percent decline in employment
Railroad conductors	-32.0
Shoemaking machine operatives	-30.2
Aircraft structure assemblers	-21.0
Central telephone office operators	-20.0
Taxi drivers	-18.9
Postal clerks	-17.9
Private household workers	-16.9
Farm laborers	-15.9
College and university faculty	-15.0
Roustabouts	-14.4
Postmasters and mail superintendents	-13.8
Rotary drill operator helpers	-11.6
Graduate assistants	-11.2
Data entry operators	-10.6
Railroad brake operators	-9.8
Fallers and buckers	-8.7
Stenographers	-7.4
Farm owners and tenants	-7.3
Typesetters and compositors	-7.3
Butchers and meatcutters	-6.3

NOTE: Includes only detailed occupations with 1982 employment of 25,000 or more.

SOURCE: U.S. Department of Labor, Bureau of Labor Statistics, Monthly Labor Review, November 1983.

For more information on these national occupational projections, as well as a complete listing of the 1,700 occupations for which projections were developed, see the November 1983 issue of the Monthly Labor Review, published by the U.S. Department of Labor, Bureau of Labor Statistics.

A P P E N D I X

Table A-1. POPULATION AND PERCENT CHANGE
NEW YORK STATE AND COUNTIES
APRIL 1, 1980 AND ESTIMATED JULY 1, 1984

County	April 1, 1980	July 1, 1984	Change 1980-1984	
			Net	Percent
New York State	17,558,072	17,735,000	176,928	1.0
Albany	285,909	285,600	-309	-0.1
Allegany	51,742	51,500	-242	-0.5
Bronx	1,168,972	1,173,000	4,028	0.3
Broome	213,648	213,500	-148	-0.1
Cattaraugus	85,697	86,100	403	0.5
Cayuga	79,894	80,300	406	0.5
Chautauqua	146,925	146,300	-625	-0.4
Chemung	97,656	93,500	-4,156	-4.3
Chenango	49,344	50,300	956	1.9
Clinton	80,750	80,900	150	0.2
Columbia	59,487	61,200	1,713	2.9
Cortland	48,820	48,200	-620	-1.3
Delaware	46,824	46,700	-124	-0.3
Dutchess	245,055	253,100	8,045	3.3
Erie	1,015,472	985,300	-30,172	-3.0
Essex	36,176	36,700	524	1.4
Franklin	44,929	43,900	-1,029	-2.3
Fulton	55,153	56,200	1,047	1.9
Genesee	59,400	59,700	300	0.5
Greene	40,861	41,400	539	1.3
Hamilton	5,034	4,900	-134	-2.7
Herkimer	66,714	67,500	786	1.2
Jefferson	88,151	88,900	749	0.8
Kings	2,230,936	2,253,900	22,964	1.0
Lewis	25,035	25,000	-35	-0.1
Livingston	57,006	58,500	1,494	2.6
Madison	65,150	67,000	1,850	2.8
Monroe	702,238	711,200	8,962	1.3
Montgomery	53,439	53,100	-339	-0.6
Nassau	1,321,582	1,338,200	16,618	1.3
New York	1,428,285	1,456,100	27,815	1.9
Niagara	227,354	219,500	-7,854	-3.5
Oneida	253,466	253,900	434	0.2
Onondaga	463,920	464,400	480	0.1
Ontario	88,909	92,100	3,191	3.6
Orange	259,603	273,500	13,897	5.4
Orleans	38,496	39,300	804	2.1
Oswego	113,901	119,100	5,199	4.6
Otsego	59,075	59,800	725	1.2
Putnam	77,193	80,900	3,707	4.8
Queens	1,891,325	1,911,200	19,875	1.1
Rensselaer	151,966	152,200	234	0.2
Richmond	352,121	370,600	18,479	5.2
Rockland	259,530	264,300	4,770	1.8
St. Lawrence	114,254	113,700	-554	-0.5

Table A-1. (continued)

County	April 1, 1980	July 1, 1984	Change 1980-1984	
			Net	Percent
Saratoga	153,759	159,800	6,041	3.9
Schenectady	149,946	150,900	954	0.6
Schoharie	29,710	30,300	590	2.0
Schuyler	17,686	17,700	14	0.1
Seneca	33,733	33,000	-733	-2.2
Steuben	99,217	99,400	183	0.2
Suffolk	1,284,231	1,315,200	30,969	2.4
Sullivan	65,155	67,200	2,045	3.1
Tioga	49,812	50,600	788	1.6
Tompkins	87,085	87,900	815	0.9
Ulster	158,158	162,700	4,542	2.9
Warren	54,854	55,500	646	1.2
Washington	54,795	56,100	1,305	2.4
Wayne	84,581	88,000	3,419	4.0
Westchester	866,599	866,900	301	-
Wyoming	39,895	40,600	705	1.8
Yates	21,459	21,500	41	0.2

SOURCE: U.S. Department of Commerce, Bureau of the Census, 1980 Census of of Population and Current Population Reports, Local Population Estimates, March 1985.

TABLE A-2. TOTAL POPULATION AND PERCENT CHANGE

NEW YORK STATE AND COUNTIES

1980 AND PROJECTED 1985 AND 1990

AREA	POPULATION			CHANGE 1980-85		CHANGE 1985-90		CHANGE 1980-90	
	1980	1985	1990	NET	PERCENT	NET	PERCENT	NET	PERCENT
NEW YORK STATE	17,558,072	17,774,520	18,023,052	216,448	1.2	248,532	1.4	464,980	2.6
ALBANY	285,909	284,362	287,176	-1,547	-0.5	2,814	1.0	1,267	0.4
ALLEGANY	51,742	51,169	51,686	-573	-1.1	517	1.0	-56	-0.1
BRONX	1,168,972	1,198,598	1,194,328	29,626	2.5	-4,270	-0.4	25,356	2.2
BROOME	213,648	212,442	212,218	-1,206	-0.6	-224	-0.1	-1,430	-0.7
CATTARAUGUS	85,697	86,449	87,859	752	0.9	1,410	1.6	2,162	2.5
CAYUGA	79,894	79,873	80,786	-21	-0.0	913	1.1	892	1.1
CHAUTAUQUA	146,925	145,930	147,439	-995	-0.7	1,509	1.0	514	0.3
CHEMUNG	97,656	96,111	95,871	-1,545	-1.6	-240	-0.2	-1,785	-1.8
CHENANGO	49,344	50,450	51,806	1,106	2.2	1,356	2.7	2,462	5.0
CLINTON	80,750	81,525	84,430	775	1.0	2,905	3.6	3,680	4.6
COLUMBIA	59,487	62,045	65,041	2,558	4.3	2,996	4.8	5,554	9.3
CORTLAND	48,820	47,923	49,410	-897	-1.8	1,487	3.1	590	1.2
DELAWARE	46,824	46,495	46,829	-329	-0.7	334	0.7	5	0.0
DUTCHESS	245,055	256,563	268,450	11,508	4.7	11,887	4.6	23,395	9.5
ERIE	1,015,472	991,748	983,773	-23,724	-2.3	-7,975	-0.8	-31,699	-3.1
ESSEX	36,176	36,962	38,045	786	2.2	1,083	2.9	1,869	5.2
FRANKLIN	44,929	43,032	42,960	-1,897	-4.2	-72	-0.2	-1,969	-4.4
FULTON	55,153	56,325	57,918	1,172	2.1	1,593	2.8	2,765	5.0
GENESEE	59,400	59,462	60,748	62	0.1	1,286	2.2	1,348	2.3
GREENE	40,861	40,868	41,219	7	0.0	351	0.9	358	0.9
HAMILTON	5,034	4,992	5,091	-42	-0.8	99	2.0	57	1.1

TABLE A-2. TOTAL POPULATION AND PERCENT CHANGE

NEW YORK STATE AND COUNTIES

1980 AND PROJECTED 1985 AND 1990

AREA	POPULATION			CHANGE 1980-85		CHANGE 1985-90		CHANGE 1980-90	
	1980	1985	1990	NET	PERCENT	NET	PERCENT	NET	PERCENT
HERKIMER	66,714	67,315	68,483	601	0.9	1,168	1.7	1,769	2.7
JEFFERSON	88,151	88,861	118,249	710	0.8	29,388	33.1	30,098	34.1
KINGS	2,230,936	2,248,139	2,225,192	17,203	0.8	-22,947	-1.0	-5,744	-0.3
LEWIS	25,035	25,006	29,350	-29	-0.1	4,344	17.4	4,315	17.2
LIVINGSTON	57,006	58,469	61,653	1,463	2.6	3,184	5.4	4,647	8.2
MADISON	65,150	66,068	69,115	918	1.4	3,047	4.6	3,965	6.1
MONROE	702,238	715,429	726,729	13,191	1.9	11,300	1.6	24,491	3.5
MONTGOMERY	53,439	53,112	53,442	-327	-0.6	330	0.6	3	0.0
NASSAU	1,321,582	1,332,393	1,340,653	10,811	0.8	8,260	0.6	19,071	1.4
NEW YORK	1,428,285	1,455,619	1,452,086	27,334	1.9	-3,533	-0.2	23,801	1.7
NIAGARA	227,354	217,263	217,257	-10,091	-4.4	-6	-0.0	-10,097	-4.4
ONEIDA	253,466	253,316	256,753	-150	-0.1	3,437	1.4	3,287	1.3
ONONDAGA	463,920	459,790	463,801	-4,130	-0.9	4,011	0.9	-119	-0.0
ONTARIO	88,909	91,588	94,464	2,679	3.0	2,876	3.1	5,555	6.2
ORANGE	259,603	275,152	292,775	15,549	6.0	17,623	6.4	33,172	12.8
ORLEANS	38,496	39,008	40,390	512	1.3	1,382	3.5	1,894	4.9
OSWEGO	113,901	119,987	126,732	6,086	5.3	6,745	5.6	12,831	11.3
OTSEGO	59,075	59,986	61,364	911	1.5	1,378	2.3	2,289	3.9
PUTNAM	77,193	80,852	86,172	3,659	4.7	5,320	6.6	8,979	11.6
QUEENS	1,891,325	1,917,172	1,914,038	25,847	1.4	-3,134	-0.2	22,713	1.2
RENSSELAER	151,966	152,099	154,073	133	0.1	1,974	1.3	2,107	1.4
RICHMOND	352,121	371,679	394,783	19,558	5.6	23,104	6.2	42,662	12.1

TABLE A-2. TOTAL POPULATION AND PERCENT CHANGE

NEW YORK STATE AND COUNTIES

1980 AND PROJECTED 1985 AND 1990

AREA	POPULATION			CHANGE 1980-85		CHANGE 1985-90		CHANGE 1980-90	
	1980	1985	1990	NET	PERCENT	NET	PERCENT	NET	PERCENT
ROCKLAND	259,530	267,276	283,872	7,746	3.0	16,596	6.2	24,342	9.4
ST. LAWRENCE	114,254	113,530	118,655	-724	-0.6	5,125	4.5	4,401	3.9
SARATOGA	153,759	160,732	169,053	6,973	4.5	8,321	5.2	15,294	9.9
SCHENECTADY	149,946	150,149	151,220	203	0.1	1,071	0.7	1,274	0.8
SCHOHARIE	29,710	30,800	31,795	1,090	3.7	995	3.2	2,085	7.0
SCHUYLER	17,686	17,455	17,595	-231	-1.3	140	0.8	-91	-0.5
SENECA	33,733	31,942	31,492	-1,791	-5.3	-450	-1.4	-2,241	-6.6
STEUBEN	99,217	97,320	98,592	-1,897	-1.9	1,272	1.3	-625	-0.6
SUFFOLK	1,284,231	1,321,518	1,395,458	37,287	2.9	73,940	5.6	111,227	8.7
SULLIVAN	65,155	67,710	70,034	2,555	3.9	2,324	3.4	4,879	7.5
TIOGA	49,812	49,329	49,696	-483	-1.0	367	0.7	-116	-0.2
TOMPKINS	87,085	89,720	92,556	2,635	3.0	2,836	3.2	5,471	6.3
ULSTER	158,158	163,135	168,471	4,977	3.1	5,336	3.3	10,313	6.5
WARREN	54,854	55,281	57,048	427	0.8	1,767	3.2	2,194	4.0
WASHINGTON	54,795	56,321	58,616	1,526	2.8	2,295	4.1	3,821	7.0
WAYNE	84,581	87,710	92,151	3,129	3.7	4,441	5.1	7,570	9.0
WESTCHESTER	866,599	870,723	871,640	4,124	0.5	917	0.1	5,041	0.6
WYOMING	39,895	40,675	42,379	780	2.0	1,704	4.2	2,484	6.2
YATES	21,459	21,567	22,092	108	0.5	525	2.4	633	2.9

SOURCE: NEW YORK STATE DEPARTMENT OF COMMERCE

Table A-3. LABOR FORCE STATUS OF THE CIVILIAN NONINSTITUTIONAL POPULATION
16 YEARS AND OVER
NEW YORK STATE
1970-1985

(Numbers in thousands)

Year/quarter	Civilian noninstitutional population	Civilian labor force		Employment total	Unemployment		
		Total	Percent of population		Total	Rate	Error range of rate
1970	12,842	7,436	57.9	7,106	331	4.5	4.2-4.8
1971	12,966	7,493	57.8	7,003	491	6.6	6.3-6.9
1972	13,046	7,489	57.4	6,989	501	6.7	6.4-7.0
1973	13,057	7,420	56.8	7,016	404	5.4	5.1-5.7
1974	13,085	7,544	57.7	7,063	482	6.4	6.1-6.7
1975	13,157	7,636	58.0	6,908	727	9.5	9.2-9.8
1976	13,222	7,685	58.1	6,896	789	10.3	9.9-10.7
1977	13,244	7,728	58.3	7,023	705	9.1	8.8-9.4
1978	13,253	7,840	59.1	7,236	604	7.7	7.3-8.1
1979	13,279	8,010	60.3	7,439	571	7.1	6.7-7.5
1980	13,313	7,978	59.9	7,381	597	7.5	7.1-7.9
1981	13,391	8,012	59.8	7,400	612	7.6	7.2-8.0
1982	13,464	7,997	59.4	7,313	684	8.6	8.2-9.0
1983	13,547	8,051	59.4	7,363	688	8.6	8.2-8.9
1984	13,633	8,089	59.3	7,505	584	7.2	6.8-7.6
1984							
1st quarter	13,599	7,981	58.7	7,346	634	8.0	-
2nd quarter	13,620	7,997	58.7	7,461	536	6.7	-
3rd quarter	13,641	8,199	60.1	7,588	612	7.5	-
4th quarter	13,666	8,176	59.8	7,624	552	6.8	-
1985							
1st quarter	13,686	8,136	59.4	7,556	580	7.1	-

Table A-4. LABOR FORCE STATUS OF THE BLACK CIVILIAN NONINSTITUTIONAL POPULATION 16 YEARS AND OVER NEW YORK STATE 1970-1985

(Numbers in thousands)

Population group and year/quarter	Civilian noninstitutional population	Civilian labor force		Employment total	Unemployment		
		Total	Percent of population		Total	Rate	Error range of rate
Black and others, both sexes							
1970	1,338	825	61.7	779	46	5.6	5.0-6.2
1971	1,450	880	60.7	811	70	7.9	7.1-8.7
1972	1,574	888	56.4	817	71	8.0	7.2-8.8
1973	1,612	891	55.3	826	65	7.3	6.4-8.2
1974	1,601	898	56.1	822	76	8.5	7.4-9.6
1975	1,716	952	55.5	835	116	12.3	11.2-13.4
1976	1,731	965	55.7	840	125	12.9	11.7-14.1
1977	1,753	992	56.6	871	121	12.2	11.0-13.4
1978	1,824	1,070	58.7	952	117	11.0	9.8-12.2
1979	1,946	1,158	59.5	1,024	134	11.6	10.4-12.8
Black, both sexes							
1980	1,771	1,010	57.1	884	126	12.4	11.2-13.8
1981	1,770	1,040	58.8	887	153	14.7	13.4-16.1
1982	1,753	1,002	57.1	863	138	13.8	12.5-15.2
1983	1,797	1,014	56.4	867	147	14.5	13.1-15.9
1984	1,891	1,063	56.2	922	141	13.3	12.0-14.6
1984							
1st quarter	1,903	1,036	54.5	916	120	11.5	-
2nd quarter	1,860	1,014	54.5	880	134	13.2	-
3rd quarter	1,948	1,166	59.9	978	189	16.2	-
4th quarter	1,851	1,036	55.9	913	123	11.9	-
1985							
1st quarter	1,896	1,072	56.5	931	141	13.1	-

NOTE: Data for the period 1970-1979 include all races except white. Beginning with 1980, data are for blacks only.

Table A-5. LABOR FORCE STATUS OF THE CIVILIAN NONINSTITUTIONAL POPULATION
16-19 YEARS
NEW YORK STATE
1970-1985

(Numbers in thousands)

Year/quarter	Civilian noninstitutional population	Civilian labor force		Employment total	Unemployment		
		Total	Percent of population		Total	Rate	Error range of rate
1970	1,183	490	41.4	424	66	13.5	12.2-14.8
1971	1,219	501	41.1	400	99	19.8	18.1-21.5
1972	1,271	548	43.2	438	109	19.9	17.9-21.9
1973	1,245	538	43.3	442	97	18.1	16.8-19.4
1974	1,286	586	45.6	476	110	18.8	17.1-20.5
1975	1,325	586	44.2	460	125	21.4	19.6-23.2
1976	1,314	577	43.9	438	140	24.3	22.7-25.9
1977	1,332	604	45.3	474	129	21.5	19.9-23.1
1978	1,337	606	45.3	478	128	21.1	19.2-23.0
1979	1,325	627	47.4	494	133	21.2	19.3-23.1
1980	1,310	591	45.1	473	118	19.9	18.0-22.0
1981	1,273	575	45.1	449	126	21.9	19.9-24.0
1982	1,260	543	43.1	421	121	22.3	20.2-24.5
1983	1,269	544	42.8	408	135	24.8	22.7-27.0
1984	1,181	497	42.1	401	97	19.4	17.3-21.5
1984							
1st quarter	1,179	442	37.4	355	86	19.5	-
2nd quarter	1,150	463	40.2	385	78	16.8	-
3rd quarter	1,187	589	49.6	464	125	21.1	-
4th quarter	1,207	495	41.0	397	98	19.8	-
1985							
1st quarter	1,150	406	35.3	324	83	20.4	-

NOTE: Some data for the period 1970-1974 were obtained by adding component parts.

Table A-6. LABOR FORCE STATUS OF THE FEMALE CIVILIAN NONINSTITUTIONAL POPULATION
16 YEARS AND OVER
NEW YORK STATE
1974-1984

(Numbers in thousands)

Year	Civilian noninstitutional population	Civilian labor force		Employment total	Unemployment		
		Total	Percent of population		Total	Rate	Error range of rate
1974	7,045	2,961	42.0	2,746	214	7.2	6.6-7.8
1975	7,121	3,065	43.0	2,762	303	9.9	9.3-10.5
1976	7,094	3,082	43.5	2,749	332	10.8	10.2-11.4
1977	7,131	3,160	44.3	2,865	293	9.3	8.8-9.8
1978	7,127	3,281	46.0	3,012	267	8.2	7.6-8.8
1979	7,143	3,403	47.6	3,141	263	7.7	7.1-8.3
1980	7,175	3,412	47.6	3,151	261	7.6	7.1-8.2
1981	7,188	3,463	48.2	3,189	275	7.9	7.4-8.5
1982	7,239	3,454	47.7	3,155	299	8.7	8.0-9.3
1983	7,352	3,519	47.9	3,235	284	8.1	7.5-8.6
1984	7,306	3,510	48.0	3,259	251	7.2	6.6-7.7

Table A-7. LABOR FORCE STATUS OF THE HISPANIC CIVILIAN NONINSTITUTIONAL POPULATION
16 YEARS AND OVER
NEW YORK STATE
1977-1984

(Numbers in thousands)

Year	Civilian noninstitutional population	Civilian labor force		Employment total	Unemployment		
		Total	Percent of population		Total	Rate	Error range of rate
1977	1,007	512	50.8	453	59	11.5	9.9-13.1
1978	984	519	52.7	461	57	11.0	9.2-12.8
1979	985	518	52.6	465	54	10.5	8.7-12.3
1980	1,076	572	53.1	510	62	10.9	9.2-12.5
1981	1,087	563	51.8	501	63	11.1	9.5-12.8
1982	1,174	596	50.8	517	79	13.2	11.5-15.0
1983	1,144	560	48.9	491	69	12.2	10.5-13.9
1984	1,217	620	50.9	544	76	12.2	10.6-13.8

Table A-8. FULL AND PART-TIME STATUS OF THE CIVILIAN LABOR FORCE
16 YEARS AND OVER
NEW YORK STATE
1970-1984 *

(Numbers in thousands)

Population group and year	Full-time labor force					Part-time labor force			
	Total	Employed		Unemployed, looking for full-time work		Total	Employed on voluntary part-time	Unemployed, looking for part-time work	
		Full-time schedules	Part-time for economic reasons	Number	Percent of full-time labor force			Total	Percent of part-time labor force
All persons 16 years and over									
1970	6,446	6,053	124	270	4.2	990	928	61	6.2
1971	6,486	5,942	150	396	6.1	1,007	912	95	9.4
1972	6,421	5,869	153	398	6.2	1,068	965	103	9.6
1973	ina					ina			
1974	ina					ina			
1975	6,590	5,727	258	606	9.2	1,045	925	120	11.6
1976	6,670	5,762	261	648	9.7	1,015	874	141	13.9
1977	6,666	5,816	270	579	8.7	1,061	935	126	11.9
1978	6,758	6,002	272	483	7.1	1,081	960	121	11.2
1979	6,838	6,125	266	448	6 5	1,171	1,047	124	10.6
1980	6,830	6,033	303	493	7.2	1,161	1,051	110	9.5
1981	6,832	6,026	308	498	7.3	1,179	1,065	115	9.7
1982	6,836	5,924	343	567	8.3	1,162	1,044	117	10.1
1983	6,926	5,979	376	571	8.3	1,125	1,009	117	10.4
1984	6,969	6,172	312	486	7.0	1,120	1,022	98	8.8
Male									
1980	4,184	3,756	136	291	7.0	384	338	46	11.9
1981	4,174	3,749	136	290	6.9	373	326	47	12.6
1982	4,190	3,692	159	339	8.1	353	307	47	13.3
1983	4,194	3,673	160	361	8.6	339	295	43	12.8
1984	4,236	3,792	150	294	6.9	343	304	39	11.2

Table A-8. (continued)

Population group and year	Full-time labor force					Part-time labor force			
		Employed		Unemployed, looking for full-time work			Employed on voluntary part-time	Unemployed, looking for part-time work	
	Total	Full-time schedules	Part-time for economic reasons	Number	Percent of full-time labor force	Total		Total	Percent of part-time labor force
Female									
1980	2,646	2,278	168	201	7.6	777	713	64	8.3
1981	2,658	2,277	173	208	7.8	806	739	67	8.3
1982	2,645	2,232	184	228	8.6	808	738	71	8.7
1983	2,732	2,305	217	210	7.7	787	713	74	9.4
1984	2,733	2,380	161	192	7.0	777	718	60	7.7
Both sexes, 16-19 years									
1980	298	183	53	63	21.0	291	234	56	19.3
1981	278	156	49	73	26.3	297	244	53	17.8
1982	255	137	48	69	27.1	289	236	53	18.2
1983	278	145	51	82	29.6	266	213	53	19.9
1984	235	135	47	53	22.6	262	219	43	16.5
White									
1978	5,778	5,160	238	379	6.6	990	884	106	10.7
1979	5,786	5,225	228	332	5 7	1,065	960	105	9.9
1980	5,795	5,163	252	379	6.5	1,049	957	92	8.8
1981	5,732	5,121	260	350	6.1	1,065	967	97	9.1
1982	5,736	5,010	292	433	7 6	1,054	957	98	9.2
1983	5,804	5,053	324	428	7.4	1,016	921	96	9.4
1984	5,781	5,167	261	353	6.1	1,007	934	73	7.2
Black and others **									
1978	980	842	35	103	10.5	90	76	14	16.0
1979	1,052	899	38	116	11.0	106	88	19	17.5
1980	1,036	870	51	115	11.1	112	94	18	15.8

Table A-8. (continued)

Population group and year	Full-time labor force					Part-time labor force			
		Employed		Unemployed, looking for full-time work			Employed on voluntary part-time	Unemployed, looking for part-time work	
	Total	Full-time schedules	Part-time for economic reasons	Number	Percent of full-time labor force	Total		Total	Percent of part-time labor force
Black									
1981	942	761	45	137	14.5	98	81	17	16.9
1982	916	748	46	121	13.3	86	69	17	19.5
1983	929	756	44	129	13.9	86	68	18	20.8
1984	976	814	44	118	12.1	87	64	24	26.9
Hispanic									
1981	521	447	17	56	10.8	***			
1982	551	450	30	71	12.8	***			
1983	515	424	28	62	12.0	***			
1984	563	475	23	65	11.6	57	46	10	18.4

* Not all data are available for all years.
** Data for the period 1978-1980 include all races except white. Beginning with 1981 data are for blacks only.
*** Data are not shown when the labor force base does not meet BLS publication standards of reliability.
ina = information not available.

Table A-9. DISTRIBUTION OF UNEMPLOYED PERSONS 16 YEARS AND OVER BY REASON FOR UNEMPLOYMENT AND SELECTED POPULATION GROUP NEW YORK STATE 1976-1984*

Population group and year	Total unemployed (000's)	Reason (percent distribution)					
		Total	Job losers		Job leavers	Reentrants	New entrants
			Total	On layoff			
All persons 16 years and over							
1976	789	100.0	62.0	13.2	6.7	19.9	11.3
1977	705	100.0	60.5	ina	7.1	19.5	13.0
1978	604	100.0	52.9	ina	8.5	24.0	14.6
1979	571	100.0	48.7	ina	9.1	26.7	15.6
1980	597	100.0	54.7	ina	8.1	23.2	13.9
1981	612	100.0	53.2	15.0	9.1	23.4	14.3
1982	684	100.0	58.3	16.2	7.3	20.5	14.0
1983	688	100.0	59.3	15.4	6.0	19.3	15.4
1984	584	100.0	53.2	13.5	8.2	22.4	16.2
Male							
1981	336	100.0	62.3	17.2	9.5	15.8	12.3
1982	385	100.0	66.6	18.0	7.0	14.9	11.5
1983	404	100.0	65.7	16.3	5.8	14.8	13.7
1984	332	100.0	59.1	13.6	7.5	18.4	15.0
Female							
1981	275	100.0	41.9	12.3	8.7	32.7	16.7
1982	299	100.0	47.7	13.9	7.6	27.6	17.1
1983	284	100.0	50.1	14.2	6.3	25.7	17.9
1984	251	100.0	45.3	13.3	9.2	27.8	17.8
Both sexes, 16-19 years							
1980	118	100.0	21.4	ina	5.4	27.9	45.4
1981	126	100.0	17.8	3.6	6.7	25.2	50.4
1982	121	100.0	20.3	3.0	5.8	25.3	48.6
1983	135	100.0	19.9	3.1	5.6	23.6	50.9
1984	97	100.0	17.8	4.5	6.2	21.7	54.3

Table A-9. (continued)

Population group and year	Total unemployed (000's)	Reason (percent distribution)					
		Total	Job losers		Job leavers	Reentrants	New entrants
			Total	On layoff			
White							
1980	463	100.0	57.5	ina	8.1	22.1	12.2
1981	448	100.0	53.5	15.7	9.1	23.6	13.8
1982	530	100.0	58.4	16.9	8.1	20.4	13.1
1983	523	100.0	58.9	16.5	6.6	19.0	15.4
1984	426	100.0	53.4	14.8	9.5	22.8	14.3
Black							
1981	153	100.0	52.9	13.5	7.5	23.8	15.8
1982	138	100.0	58.0	13.6	4.0	21.4	16.6
1983	147	100.0	61.3	12.3	3.7	19.6	15.3
1984	141	100.0	52.3	9.7	4.5	22.3	20.9
Hispanic							
1981	63	100.0	55.2	15.3	12.4	19.3	13.0
1982	79	100.0	62.4	14.2	6.3	13.7	17.5
1983	69	100.0	63.8	16.9	6.8	13.3	16.2
1984	76	100.0	50.6	10.3	7.0	23.9	18.4

* Not all data are available for all years.
ina = information not available.

Table A-10. DISTRIBUTION OF UNEMPLOYED PERSONS 16 YEARS AND OVER
BY DURATION OF UNEMPLOYMENT AND SELECTED POPULATION GROUP
NEW YORK STATE
1970-1984 *

Population group and year	Total unemployed (000's)	Duration (percent distribution)							
		Total	Less than 5 weeks	5-14 weeks	15 weeks and over	15-26 weeks	27 weeks and over	27-51 weeks	52 weeks and over
All Persons 16 years and over									
1970	331	100.0	49.2	33.0	17.7	11.4	6.3	3.9	2.4
1971	491	100.0	40.4	31.9	27.8	16.1	11.7	7.9	3.8
1972	501	ina							
1973	404	ina							
1974	482	ina							
1975	727	100.0	29.8	29.1	41.1	19.1	22.0	13.5	8.5
1976	789	100.0	ina	56.7**	43.3	16.9	26.4	13.2	13.2
1977	705	100.0	31.6	26.7	41.7	16.4	25.3	12.0	13.3
1978	604	100.0	33.2	30.4	36.5	17.0	19.5	7.8	11.7
1979	571	100.0	38.3	31.7	30.1	16.6	13.5	6.0	7.5
1980	597	100.0	39.3	31.5	29.3	14.9	14.4	7.9	6.5
1981	612	100.0	37.4	31.4	31.2	14.8	16.4	7.0	9.3
1982	684	100.0	33.5	32.3	34.2	18.3	15.9	6.6	9.3
1983	688	100.0	30.0	29.1	41.0	17.8	23.2	9.6	13.6
1984	584	100.0	33.7	30.0	36.3	15.1	21.3	7.9	13.4
Male									
1978	334	100.0	30.7	29.8	39.6	17.4	22.2	8.1	14.1
1979	308	100.0	33.7	30.9	35.4	19.5	15.9	6.3	9.6
1980	336	ina							
1981	336	100.0	34.4	31.1	34.5	14.6	19.9	8.5	11.4
1982	385	100.0	30.1	32.2	37.7	18.6	19.1	7.0	12.1
1983	404	100.0	24.8	29.1	46.1	19.1	27.0	10.0	17.0
1984	332	100.0	29.8	29.6	40.5	16.0	24.7	8.4	16.3

Table A-10. (continued)

Population group and year	Total unemployed (000's)	Duration (percent distribution)							
		Total	Less than 5 weeks	5-14 weeks	15 weeks and over	15-26 weeks	27 weeks and over	27-51 weeks	52 weeks and over
Female									
1978	267	100.0	36.2	31.1	32.7	16.5	16.2	7.4	8.8
1979	263	100.0	43.6	32.6	23.8	13.2	10.6	5.6	5.0
1980	261	ina							
1981	275	100.0	40.9	31.9	27.2	15.1	12.1	5.4	6.7
1982	299	100.0	37.9	32.5	29.7	17.9	11.8	6.0	15.8
1983	284	100.0	37.3	29.1	33.6	15.9	17.7	9.0	8.8
1984	251	100.0	38.7	30.5	30.8	13.9	16.8	7.2	9.6
Both sexes, 16-19 years									
1980	118	100.0	50.9	32.9	16.3	11.1	5.2	2.9	2.3
1981	126	100.0	48.1	31.8	20.1	12.0	8.1	3.7	4.4
1982	121	100.0	45.5	35.0	19.5	11.4	8.1	3.4	4.7
1983	135	100.0	41.6	33.0	25.4	13.1	12.3	7.1	5.2
1984	97	100.0	47.1	34.5	18.4	9.3	9.2	4.1	5.2
White									
1978	486	100.0	35.3	30.1	34.7	16.5	18.2	7.9	10.3
1979	438	100.0	39.7	31.9	28.4	16.3	12.1	5.9	6.2
1980	463	100.0	39.3	32.1	28.6	15.3	13.3	7.7	5.6
1981	448	100.0	38.2	31.4	30.4	14.9	15.5	7.7	7.8
1982	530	100.0	34.7	33.1	32.2	17.7	14.5	6.4	8.1
1983	523	100.0	31.1	29.9	39.0	18.0	21.0	9.0	12.0
1984	426	100.0	34.7	30.1	35.3	15.0	20.3	8.0	12.2
Black									
1981	153	100.0	36.3	31.0	32.8	14.0	18.8	4.9	13.9
1982	138	100.0	27.6	30.4	42.0	20.4	21.6	7.3	14.3
1983	147	100.0	26.0	25.5	48.5	17.3	31.1	11.2	19.9
1984	141	100.0	31.5	30.0	38.5	14.9	23.8	7.8	15.6

Table A-10. (continued)

Population group and year	Total unemployed (000's)	Duration (percent distribution)							
		Total	Less than 5 weeks	5-14 weeks	15 weeks and over	15-26 weeks	27 weeks and over	27-51 weeks	52 weeks and over
Hispanic									
1981	63	100.0	39.8	30.5	29.7	12.5	17.2	7.3	9.9
1982	79	100.0	31.5	33.6	34.9	16.0	18.9	9.6	9.3
1983	69	100.0	28.3	34.2	37.5	18.4	19.2	7.4	11.7
1984	76	100.0	35.9	34.3	29.8	14.5	14.6	6.6	7.9

* Not all data are available for all years.
** Data are for less than 15 weeks.
ina = information not available.

Table A-11. OCCUPATIONAL DISTRIBUTION OF EMPLOYMENT
BY SELECTED POPULATION GROUP
NEW YORK STATE
1983 - 1984 *

(Annual averages, percent of total employed

Occupational group	Employed			
	Total	Female	Black	Hispanic
			1984	
Total	100.0	100.0	100.0	100.0
Executive, administrative and managerial	11.8	8.7	6.1	7.2
Professional specialty	14.4	16.3	9.2	5.3
Technicians and related support	3.4	3.6	2.6	2.2
Sales	11.5	12.0	5.3	7.5
Administrative support, including clerical	18.8	31.9	27.1	20.6
Service occupations	14.8	17.5	26.2	22.1
Precision production, craft and repair	10.6	1.9	7.6	10.7
Machine operators, assemblers, and inspectors	6.2	6.0	6.8	14.9
Transportation and material moving	3.6	0.7	4.3	4.4
Handlers, equipment cleaners, helpers and laborers	3.3	1.0	4.1	4.0
Farming, forestry and fishing	1.6	0.5	0.4	1.1
			1983	
Total	100.0	100.0	100.0	100.0
Executive, administrative and managerial	11.4	8.4	7.0	7.0
Professional specialty	14.4	16.0	10.0	5.8
Technicians and related support	3.0	2.9	3.3	1.4
Sales	11.3	11.9	5.1	8.2
Administrative support, including clerical	19.0	32.8	25.6	17.6
Service occupations	14.9	17.1	25.1	23.7
Precision production, craft and repair	10.4	1.6	7.4	12.0
Machine operators, assemblers, and inspectors	6.7	6.8	7.9	15.0
Transportation and material moving	3.6	0.6	4.5	4.2
Handlers, equipment cleaners, helpers and laborers	3.3	1.3	4.0	4.6
Farming, forestry and fishing	1.9	0.8	0.2	0.5

* Beginning with 1983, data are coded according to the classification system used in the 1980 Census. Data for the period, 1974-1982 were coded according to the 1970 Census classification system. These new occupational categories are so radically different that their implementation represents a break in historical data series. Consequently, data in Tables 20 and 21 are not comparable.

Table A-12. TOTAL AND PER CAPITA PERSONAL INCOME
NEW YORK STATE AND COUNTIES
1982 AND 1983

Area	Personal income					
	Total (In millions)			Per capita		
	1983	1982	Percent increase	1983	1982	Percent increase
New York State	$229,921.8	$214,696.7	7.1	$13,014	$12,222	6.5
Albany	3,740.6	3,477.0	7.6	13,059	12,209	7.0
Allegany	390.7	383.2	2.0	7,519	7,423	1.3
Bronx	11,345.4	10,663.9	6.4	9,835	9,151	7.5
Broome	2,445.7	2,309.2	5.9	11,357	10,820	5.0
Cattaraugus	729.5	701.9	3.9	8,407	8,169	2.9
Cayuga	754.6	710.0	6.3	9,406	8,897	5.7
Chautauqua	1,447.5	1,383.9	4.6	9,897	9,458	4.6
Chemung	981.0	937.6	4.6	10,197	9,821	3.8
Chenango	438.7	418.2	4.9	8,679	8,404	3.3
Clinton	681.6	632.7	7.7	8,387	7,840	7.0
Columbia	594.7	559.3	6.3	9,841	9,332	5.5
Cortland	436.8	412.7	5.8	8,947	8,496	5.3
Delaware	404.3	386.5	4.6	8,644	8,299	4.2
Dutchess	3,194.5	2,993.4	6.7	12,761	12,152	5.0
Erie	11,418.4	10,984.1	4.0	11,398	11,004	3.6
Essex	334.5	315.7	6.0	9,113	8,667	5.1
Franklin	346.3	325.4	6.4	7,722	7,391	4.5
Fulton	533.4	498.6	7.0	9,545	9,042	5.6
Genesee	635.3	609.4	4.3	10,516	10,250	2.6
Greene	394.1	371.7	6.0	9,633	9,104	5.8
Hamilton	45.4	43.4	4.6	8,925	8,729	2.2
Herkimer	624.9	592.8	5.4	9,333	8,895	4.9
Jefferson	830.3	777.4	6.8	9,364	8,925	4.9
Kings	23,914.8	22,468.0	6.4	10,740	10,009	7.3
Lewis	190.9	181.0	5.5	7,587	7,290	4.1
Livingston	582.5	556.9	4.6	9,976	9,698	2.9
Madison	625.3	584.2	7.0	9,373	8,937	4.9
Monroe	9,631.2	9,283.9	3.7	13,496	13,099	3.0
Montgomery	534.6	506.0	5.7	10,162	9,539	6.5
Nassau	24,079.8	22,167.4	8.6	17,999	16,808	7.1
New York	26,815.0	24,798.7	8.1	18,813	17,392	8.2
Niagara	2,473.9	2,371.2	4.3	11,018	10,684	3.1
Oneida	2,652.5	2,503.4	6.0	10,445	9,933	5.2
Onondaga	5,540.0	5,176.4	7.0	11,885	11,245	5.7
Ontario	979.8	939.6	4.3	10,809	10,491	3.0
Orange	2,976.2	2,764.7	7.7	11,089	10,407	6.6
Orleans	392.2	376.7	4.1	10,013	9,735	2.9
Oswego	1,112.8	1,029.3	8.1	9,472	9,011	5.1
Otsego	529.0	501.7	5.4	8,864	8,467	4.7
Putnam	1,129.3	1,035.5	9.1	14,084	13,170	6.9

Table A-12. (continued)

Area	Personal income					
	Total (In millions)			Per capita		
	1983	1982	Percent increase	1983	1982	Percent increase
Queens	$ 25,782.3	$ 24,096.2	7.0	$13,564	$12,660	7.1
Rensselaer	1,596.6	1,494.1	6.9	10,481	9,880	6.1
Richmond	4,878.2	4,479.7	8.9	13,286	12,430	6.9
Rockland	4,114.9	3,784.3	8.7	15,487	14,539	6.5
St. Lawrence	941.9	877.1	7.4	8,248	7,778	6.0
Saratoga	1,733.2	1,605.1	8.0	10,932	10,345	5.7
Schenectady	1,946.1	1,828.6	6.4	12,987	12,240	6.1
Schoharie	246.7	231.2	6.7	8,214	7,847	4.7
Schuyler	154.3	147.2	4.8	8,586	8,356	2.8
Seneca	341.4	327.8	4.1	10,265	9,957	3.1
Steuben	969.0	924.3	4.8	9,693	9,415	3.0
Suffolk	17,440.9	15,956.7	9.3	13,239	12,391	6.8
Sullivan	680.6	638.6	6.6	10,339	9,890	4.5
Tioga	505.2	480.5	5.1	10,162	9,653	5.3
Tompkins	829.6	777.6	6.7	9,463	8,834	7.1
Ulster	1,800.7	1,639.3	9.8	11,225	10,304	8.9
Warren	573.5	538.1	6.6	10,265	9,799	4.8
Washington	488.6	462.7	5.6	8,742	8,409	4.0
Wayne	933.6	893.0	4.5	10,615	10,375	2.3
Westchester	16,499.7	15,248.3	8.2	18,938	17,669	7.2
Wyoming	357.8	341.8	4.7	8,741	8,462	3.3
Yates	199.3	191.8	3.9	9,203	9,046	1.7

SOURCE: U.S. Department of Commerce, Bureau of Economic Analysis.

Table A-13. SELECTED CHARACTERISTICS OF RESIDENTS IN SERVICE DELIVERY AREAS UNDER THE JOB TRAINING PARTNERSHIP ACT OF 1982

Service Delivery Areas	1984 annual averages			Individuals unemployed 15 weeks or longer in 1984	1980 economically disadvantaged individuals		
	Total unemployed	Unemployment rate	Excess unemployed		Total	16-21 years	22 years and over
Albany-Rensselaer-Schenectady counties	14,442	5.2	1,893	21,500	90,174	14,019	50,868
Allegany-Cattaraugus-Chautauqua counties	10,148	8.4	4,707	15,100	52,229	7,027	28,299
Broome-Tioga counties	6,792	5.4	1,131	9,300	39,075	6,002	21,661
Buffalo City-Cheektowaga/Tonawanda towns	23,728	10.0	13,046	33,500	120,208	14,982	68,218
Cayuga-Cortland-Tompkins counties	6,630	7.2	2,487	9,400	40,657	8,689	21,283
Chemung-Schuyler-Steuben counties	6,787	8.0	2,967	11,100	39,064	4,742	21,391
Clinton-Essex-Franklin-Hamilton counties	6,695	9.2	3,424	8,700	35,992	5,293	19,576
Columbia-Greene counties	3,215	7.2	1,210	4,100	17,372	1,715	10,544
Delaware-Otsego-Chenango counties	4,477	6.4	1,332	6,500	31,006	4,661	16,944
Dutchess-Putnam counties	6,739	4.4	0	10,600	33,477	3,864	19,764
Erie County balance 1/	14,637	7.3	5,578	19,200	41,496	4,933	24,311
Fulton-Montgomery-Schoharie counties	6,986	10.8	4,067	7,700	25,746	2,710	14,861
Genesee-Livingston-Orleans-Wyoming counties	7,813	8.4	3,609	10,900	28,426	3,842	15,324
Hempstead Town-Long Beach City	21,655	5.3	3,221	21,000	73,266	8,532	41,284
Herkimer-Madison-Oneida counties	11,858	7.2	4,494	17,500	70,782	9,371	38,963
Jefferson-Lewis counties	6,226	12.0	3,901	8,100	23,981	2,874	13,265
Monroe County balance 2/	8,523	3.7	0	12,400	31,998	6,040	17,558
Nassau County balance 3/	13,364	4.4	0	15,700	36,602	4,411	22,123
New York City	270,000	8.9	134,010	324,100	2,012,084	232,615	1,123,045
Niagara County	9,593	10.9	5,619	13,200	31,244	3,803	17,314
Onondaga County balance 4/	6,851	4.8	387	9,200	26,173	3,265	14,432

Table A-13. (continued)

Service Delivery Areas	1984 annual averages			Individuals unemployed 15 weeks or longer in 1984	1980 economically disadvantaged individuals		
	Total unemployed	Unemployment rate	Excess unemployed		Total	16-21 years	22 years and over
Ontario-Seneca-Wayne-Yates counties	9,074	8.2	4,114	11,700	32,376	4,045	18,078
Orange County	6,882	6.2	1,850	8,700	39,420	4,411	21,382
Oswego County	4,338	7.6	1,781	6,100	20,816	3,050	10,956
Rochester City	9,012	8.2	4,081	13,000	59,620	7,667	31,542
Rockland County	6,380	4.8	443	7,800	25,929	2,705	13,333
St. Lawrence County	3,676	8.7	1,783	5,800	27,680	4,277	14,576
Saratoga-Warren-Washington counties	7,924	6.4	2,374	11,500	41,615	5,200	22,610
Suffolk County	37,826	5.4	6,202	46,200	146,226	17,567	76,933
Sullivan County	1,908	6.7	631	2,800	14,727	1,791	8,753
Syracuse City	5,111	6.7	1,664	7,800	43,042	7,533	22,836
Ulster County	4,249	5.9	998	6,000	25,526	3,184	15,435
Westchester County Balance 5/	14,618	4.0	0	19,300	67,965	7,369	40,798
Yonkers City	5,893	5.6	1,174	7,200	30,777	3,460	17,249

NOTE: Excess unemployment is defined as unemployment in excess of 4½ percent of the labor force. The economically disadvantaged are those persons whose family income was at or below the poverty level or 70 percent of the lower living standard income level, whichever was higher, according to the 1980 Census.

1. Erie County minus Buffalo City, Cheektowaga and Tonawanda towns.
2. Monroe County minus Rochester City.
3. Nassau County minus Hempstead Town and Long Beach City.
4. Onondaga County minus Syracuse City.
5. Westchester County minus Yonkers City.

Table A-14. TRENDS AND PROJECTIONS OF PUBLIC AND NONPUBLIC SCHOOL ENROLLMENT NEW YORK STATE 1980-1981 TO 1989-1990

Year	Type of school		Total	
	Public	Nonpublic	Number	Percent change *
Actual				
1980-1981	2,838,393	579,864	3,418,257	-2.8
1981-1982	2,748,397	576,439	3,324,836	-2.7
1982-1983	2,683,598	570,460	3,254,058	-2.1
1983-1984	2,661,041	564,409	3,225,450	-0.9
Projected				
1984-1985	2,604,942	559,529	3,164,471	-1.9
1985-1986	2,577,688	556,327	3,134,015	-1.0
1986-1987	2,555,419	553,893	3,109,312	-0.8
1987-1988	2,533,872	552,134	3,086,006	-0.7
1988-1989	2,512,751	550,935	3,063,686	-0.7
1989-1990	2,511,004	550,223	3,061,227	-0.1
1990-1991	2,522,754	550,012	3,072,766	0.4
1991-1992	2,543,681	550,065	3,093,746	0.7
1992-1993	2,566,128	551,210	3,117,338	0.8
1993-1994	2,586,785	551,853	3,138,638	0.7

* Percent change in total enrollment from previous year.

NOTE: Public and nonpublic school enrollment totals include grades kindergarten through 12 and ungraded students.

SOURCE: New York State Education Department.

Table A-15. PUBLIC HIGH SCHOOL DROPOUTS AND RATES * NEW YORK STATE - NEW YORK CITY 1970-1971 THROUGH 1983-1984

School year	New York State		New York City	
	Number	Rate	Number	Rate
1970-1971	57,511	5.8	34,301	10.4
1971-1972	57,922	5.6	34,133	10.3
1972-1973	60,230	5.7	35,124	10.4
1973-1974	60,003	5.7	33,783	9.9
1974-1975	57,975	5.4	33,336	9.8
1975-1976	63,163	5.9	36,985	10.8
1976-1977	65,765	6.1	37,662	10.8
1977-1978	67,861	6.4	39,428	11.6
1978-1979	71,006	6.8	42,094	12.6
1979-1980	65,971	6.6	38,432	11.9
1980-1981	65,229	6.7	39,203	12.4
1981-1982	60,311	6.5	37,360	12.4
1982-1983	60,834	6.9	39,176	13.7
1983-1984	55,880	6.5	34,291	12.1

* The percent of students in grades 9-12 who leave school during the academic year and do not enroll in another school.

SOURCE: New York State Education Department.

Table A-16. NEW YORK STATE JOB SERVICE APPLICANTS
SELECTED CHARACTERISTICS BY AGE
JULY 1, 1984 - MAY 31, 1985

Applicant groups	Total all ages	Under 20	20-24	25-39	40-54	55+
All applicants	1,314,245	168,061	303,655	539,160	219,794	83,575
Veterans a/	142,589	502	17,499	65,703	34,369	23,464
Vietnam Era a/	53,412	-	-	41,678	9,557	1,125
Women	653,033	87,321	139,433	264,480	121,436	40,363
Handicapped	89,344	2,960	8,130	39,626	28,764	9,864
Welfare recipients	399,468	43,755	73,433	192,484	76,284	13,512
Minority	571,773	82,068	121,854	244,909	98,604	24,338
Black, not Hispanic	355,399	56,709	83,005	148,402	53,206	14,077
Hispanic	197,703	23,167	35,045	88,500	41,754	9,237
Other	18,671	2,192	3,804	8,007	3,644	1,024
	Percentages of age groups in each applicant group b/					
All applicants	100.0	12.8	23.1	41.0	16.7	6.4
Veterans a/	100.0	0.4	12.3	46.1	24.1	16.5
Vietnam Era a/	100.0	-	-	78.0	17.9	2.1
Women	100.0	13.4	21.4	40.5	18.6	6.2
Handicapped	100.0	3.3	9.1	44.4	32.2	11.0
Welfare recipients	100.0	11.0	18.4	48.2	19.1	3.4
Minority	100.0	14.4	21.3	42.8	17.2	4.3
Black, not Hispanic	100.0	16.0	23.4	41.8	15.0	4.0
Hispanic	100.0	11.7	17.7	44.8	21.1	4.7
Other	100.0	11.7	20.4	42.9	19.5	5.5
	Percentages of applicants groups in each age group					
All applicants	100.0	100.0	100.0	100.0	100.0	100.0
Veterans	10.8	0.3	5.8	12.2	15.6	28.1
Vietnam Era	4.1	-	-	7.7	4.3	1.3
Women	49.7	52.0	45.9	49.1	55.2	48.3
Handicapped	6.8	1.8	2.7	7.3	13.1	11.8
Welfare recipients	30.4	26.0	24.2	35.7	34.7	16.2
Minority	43.5	48.8	40.1	45.4	44.9	29.1
Black, not Hispanic	27.0	33.7	27.3	27.5	24.2	16.8
Hispanic	15.0	13.8	11.5	16.4	19.0	11.1
Other	1.4	1.3	1.3	1.5	1.7	1.2

a. Detail does not add to total because of unknown age groups in the veteran categories.

b. Detail may not add to total due to rounding.

SOURCE: Employment Security Automated Reporting System (ESARS).

Table A-17. NEW YORK STATE JOB SERVICE APPLICANTS
SELECTED CHARACTERISTICS BY OCCUPATIONAL GROUP
JULY 1, 1984 - MAY 31, 1985

Occupational group	All applicants	Women	Minority	Veteran	Handicapped	Welfare recipient	Youth *
All groups	1,155,954	569,920	529,155	138,041	87,093	385,405	228,806
Professional, technical, managerial	129,224	60,032	26,925	22,492	6,418	12,792	6,490
Clerical	299,407	220,226	152,121	16,815	15,079	85,064	89,907
Sales	48,259	23,289	14,256	5,957	2,825	9,831	10,823
Service	208,544	110,821	106,750	19,079	19,301	87,499	46,599
Agriculture, fishery, forestry	13,626	1,820	3,139	1,594	1,126	5,031	3,961
Processing	19,008	5,380	6,567	3,144	1,380	5,870	1,800
Machine trades	60,432	8,778	19,272	14,849	4,487	15,208	7,019
Benchwork	89,828	63,565	51,863	5,107	10,101	30,650	8,639
Structural work	92,653	6,491	30,986	24,555	7,000	27,534	12,429
Motor freight and transportation	37,738	1,966	14,222	11,417	3,221	10,972	3,528
Packaging and material handling	150,683	65,854	100,494	11,514	15,685	93,404	36,950
Other occupations	6,552	1,698	2,560	1,518	470	1,550	661
	Percentages of applicant groups in each occupational group						
All groups	100.0	49.3	45.8	11.9	7.5	33.3	19.8
Professional, technical, managerial	100.0	46.5	20.8	17.4	5.0	9.9	5.0
Clerical	100.0	73.6	50.8	5.6	5.0	28.4	30.0
Sales	100.0	48.3	29.5	12.3	5.9	20.4	22.4
Service	100.0	53.1	51.2	9.1	9.3	42.0	22.3
Agriculture, fishery, forestry	100.0	13.4	23.0	11.7	8.3	36.9	29.1
Processing	100.0	28.3	34.5	16.5	7.3	30.9	9.5
Machine trades	100.0	14.5	31.9	24.6	7.4	25.2	11.6
Benchwork	100.0	70.8	57.7	5.7	11.2	34.1	9.6
Structural work	100.0	7.0	33.4	26.5	7.6	29.7	13.4
Motor freight and transportation	100.0	5.2	37.7	30.3	8.5	29.1	9.3
Packaging and material handling	100.0	43.7	66.7	7.6	10.4	62.0	24.5
Other occupations	100.0	25.9	39.1	23.2	7.2	23.7	10.1

Table A-17. (continued)

Occupational group	All applicants	Women	Minority	Veteran	Handicapped	Welfare recipient	Youth *
	Percentages of occupational groups in each applicant group						
All groups	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Professional, technical, managerial	11.2	10.5	5.1	16.3	7.4	3.3	2.8
Clerical	25.9	38.6	28.7	12.2	17.3	22.1	39.3
Sales	4.2	4.1	2.7	4.3	3.2	2.6	4.7
Service	18.0	19.4	20.2	13.8	22.2	22.7	20.4
Agriculture, fishery, forestry	1.2	0.3	0.6	1.2	1.3	1.3	1.7
Processing	1.6	0.9	1.2	2.3	1.6	1.5	0.8
Machine trades	5.2	1.5	3.6	10.8	5.2	3.9	3.1
Benchwork	7.8	11.2	9.8	3.7	11.6	8.0	3.8
Structural work	8.0	1.1	5.9	17.8	8.0	7.1	5.4
Motor freight and transportation	3.3	0.3	2.7	8.3	3.7	2.8	1.5
Packaging and material handling	13.0	11.6	19.0	8.3	18.0	24.2	16.1
Other occupations	0.6	0.3	0.5	1.1	0.5	0.4	0.3

* Under 22 years of age.

NOTE: Detail may not add to total due to rounding. Also, an individual may be classified in more than one applicant group. Applicants are more numerous on Table A-16 than on this table because applicants are limited to those assigned occupations.

SOURCE: Employment Security Automated Reporting System (ESARS).

Table A-18. MONTHLY AVERAGE NUMBER OF PERSONS OR CASES
INCOME MAINTENANCE PROGRAMS BY PROGRAM
NEW YORK STATE
1975-1983

Year	Total persons	Aid to Families with Dependent Children			Emergency Assistance to		Home Relief			
		Total persons	Children	Adults	Families Persons	Adults Persons	Total Persons	Family Cases	Family Persons	One-person cases
1975	1,459,651	1,217,265	855,582	361,683	26,158	907	215,321	26,126	116,728	98,593
1976	1,484,145	1,231,361	856,803	374,558	17,152	1,471	234,161	27,186	110,504	123,657
1977	1,430,556	1,213,391	836,968	376,423	19,980	1,568	195,617	18,257	65,514	130,103
1978	1,358,744	1,154,517	802,845	351,672	24,171	1,255	178,801	15,401	53,659	125,142
1979	1,302,844	1,104,841	765,733	339,108	27,250	1,164	169,589	13,805	46,497	123,092
1980	1,327,636	1,102,390	759,456	342,933	55,790	1,048	168,408	13,069	43,078	125,330
1981	1,347,600	1,110,437	757,716	352,721	61,917	ina	174,306	13,302	43,673	130,633
1982	1,296,375	1,084,121	728,832	355,289	10,124	ina	201,414	16,434	52,876	148,538
1983	1,354,020	1,099,115	724,849	374,266	9,975	ina	244,313	20,515	65,045	179,268

ina = information not available.
SOURCE: New York State Department of Social Services.

G L O S S A R Y

GLOSSARY

EMPLOYMENT SECURITY CONCEPTS

1. Total Employment and Total Unemployment

Civilian labor force. The sum of total employed and total unemployed persons by place of residence.

Employed persons. Employed persons comprise: a) all those who during the survey week did any work at all as paid employees, or in their own business, profession, or farm, or who worked 15 hours or more as unpaid workers in an enterprise operated by a member of the family, and, b) all those who were not working but who had jobs or businesses from which they were temporarily absent because of illness, bad weather, vacation, labor-management dispute, or personal reasons, whether or not they were paid by their employers for the time off, and whether or not they were seeking other jobs.

Unemployed persons. Unemployed persons comprise all persons who did not work during the survey week, who made specific efforts to find a job within the past 4 weeks, and who were available for work during the survey week (except for temporary illness). Also included as unemployed are those who did not work at all, were available for work, and a) were waiting to be called back to a job from which they had been laid off, or b) were waiting to report to a new wage or salary job within 30 days.

Unemployment rate. The total number of unemployed persons expressed as a percentage of total employment and unemployment combined, that is, as a percentage of the civilian labor force.

2. Nonagricultural Employment

Employment, nonfarm. Estimates include all nonagricultural wage and salary jobs in an area for which workers received pay for any part of the pay period that included the 12th of the month. Persons on paid sick leave, paid holiday, or paid vacation are included, but those on leave without pay for the entire payroll period are excluded. Persons on the payroll of more than one establishment during the period are counted each time reported. Self-employed persons, unpaid family workers, and domestic workers in private households are excluded.

Nonagricultural establishments. All employing units except commercial and noncommercial farms, international government, and private households.

Standard Industrial Classification (SIC). Nonagricultural wage and salary estimates are classified in accordance with the 1972 edition of the Standard Industrial Classification Manual, prepared by the Statistical Policy Division, Office of Management and Budget, Executive Office of the President,

NOTE: The concepts of employed and unemployed under the Employment Security programs, the Current Population Survey and the Census all attempt to measure identical categories but use different methodologies.

except for government employment, which is classified in accordance with the 1967 edition. Coverage of the classification "services and miscellaneous" for New York State includes: the "Services Industry Division," "Forestry," "Fisheries," selected services relating to agriculture and nonclassifiable establishments. (A manufacturing industry is an aggregation of establishments producing a single product or a closely related group of products. An establishment which manufactures more than one product is classified by its most important product as determined by its share of value added at the establishment.)

3. Hours and Earnings

Earnings, average. The figures are calculated on a "gross" basis, reflecting basic hourly and incentive wage rates, also premium pay for overtime and shift work as well as output of workers paid on an incentive plan.

For manufacturing, the averages cover production and related workers. For nonmanufacturing, the averages cover all nonsupervisory employees and working supervisors (e.g., office workers, sales workers, custodial workers), unless otherwise specified, in selected industries.

Earnings differ from wage rates. Earnings are the actual return to the worker for a stated period of time; rates are the amounts stipulated for a given unit of work or time.

> Earnings, average hourly. Represent payrolls divided by total number of hours worked or paid for (including paid holiday, vacation, and sick-leave hours) during the period reported.
>
> Earnings, average weekly. Derived by multiplying average weekly hours by average hourly earnings. Therefore, weekly earnings are affected not only by changes in average hourly earnings but also by changes in length of the workweek.

Hours, average weekly. The workweek information relates to the hours for which pay was received and differs from the standard or scheduled hours; the average is derived by dividing the total hours worked or paid for (including paid holiday, vacation, and sick-leave hours) during the reference week by the number of employees. Factors such as overtime cause average weekly hours to exceed standard hours while unpaid absenteeism, labor turnover, part-time work, and stoppages cause average weekly hours to be lower than scheduled hours. Group averages further reflect differences in the workweek of component industries.

Production workers. Includes working foremen and all nonsupervisory workers (including leadmen and trainees) engaged in fabricating, processing, assembling, inspection, receiving, storage, handling, packing, warehousing, shipping, maintenance, repair, janitorial and watchman services, product development, auxiliary production for plant's own use (e.g., power plant), recordkeeping, and other services closely associated with the above production operations. Excludes supervisory employees (above the working-foreman level) and their clerical staffs, routemen, salesmen, and force-account construction workers.

4. Unemployment Insurance Program

Beneficiary. An individual who filed a valid original claim, established a benefit year, and received at least one benefit payment for a full or partial week of unemployment during his or her benefit year. Beneficiary characteristics data are obtained for the mid-week of the month. In this report, characteristics data on beneficiaries were obtained from an unduplicated count of persons who received a benefit payment in 1984.

Industry. The industrial classification of beneficiaries is based on that of the chargeable employer, that is, the employer whose account is debited for the benefit payment--usually the last employer.

Unemployment benefits. Amounts paid to eligible claimants with respect to their unemployment.

5. Job Service

Active applicants. Jobseekers registered with the Job Service, whose applicant record, on a given day, has not expired. Generally, applicant records become inactive within 2 to 6 months if no reportable service occurs in the intervening months.

Applicant placed. The hiring by an employer of an individual referred by the employment service for a job or interview providing that the employment service completed all of the following steps: a) prepared a job order form prior to referral; b) made prior arrangements with the employer for the referral of an individual or individuals; c) referred an individual who had not been specifically designated by the employer; d) verified from a reliable source, preferably the employer that the individual had entered on the job; and e) recorded the placement on appropriate employment service forms.

Job applicant registered. An applicant whose availability for referral to job opportunities, training, and/or employability development services has been officially recorded on an application.

Job opening filled. Job openings for which an applicant referred by a local office has been hired by an employer and has entered on the job.

ESARS (Employment Security Automated Reporting System). A computer system providing data printouts on a wide range of Job Service operations concerning job order, job applicants and departmental programs.

Dictionary of Occupational Titles (DOT). A dictionary, prepared by the U.S. Department of Labor, which classifies occupations by title and code, and gives an extensive analysis and description of the job duties each occupation entails and what traits are needed by workers.

6. Job Training Partnership Act of 1982 (JTPA)

This law is designed to provide remedial education, training and employment assistance to low income and unemployed youths and adults primarily through a locally-based program delivery system. It is composed of five titles or major sections:

Title I - deals with state and local service delivery system and general program and administrative issues.

Title II - authorizes funding and sets forth requirements for training services to be provided at the local level for disadvantaged youth and adults.

Title III - provides for a separate, state-administered training and employment aid program for dislocated workers which requires state consultation with local private industry councils at key points of decisionmaking.

Title IV - establishes funding and requirements for federally administered activities including: programs for Native Americans, migrant workers and veterans; Job Corps; research, demonstration, evaluation, training and technical assistance; labor market information systems; and functions of the National Commission for Employment Policy.

Title V - contains miscellaneous provisions and training-related changes to other federal laws, including: amendments to the Wagner-Peyser Act altering funding to state employment service agencies and requiring joint planning between the job training and employment service delivery systems; and amendments to the Social Security Act affecting coordination between the job training delivery and the Work Incentive Program carried out by state and local welfare agencies.

7. Metropolitan Statistical Areas

Revised definitions of the nation's Metropolitan Statistical Areas (MSA's) took effect officially in June 1983. They reflected application of detailed standards prepared by the Federal Committee on MSA's to demographic data drawn from the 1980 Census.

The previous term "Standard Metropolitan Statistical Area" (SMSA) was shortened to "Metropolitan Statistical Area" (MSA). If an area has more than one million population and meets certain other specified requirements, it is now termed a "Consolidated Metropolitan Statistical Area" (CMSA), consisting of major components recognized as "Primary Metropolitan Statistical Areas" (PMSA's). Following is a list of MSA's and PMSA's in New York State and their component counties.

Name	Counties included
Albany-Schenectady-Troy MSA	Albany, Greene, Montgomery, Rensselaer, Saratoga and Schenectady
Binghamton MSA	Broome and Tioga
Elmira MSA	Chemung
Glens Falls MSA	Warren and Washington
Poughkeepsie MSA	Dutchess
Rochester MSA	Livingston, Monroe, Ontario, Orleans and Wayne
Syracuse MSA	Madison, Onondaga and Oswego
Utica-Rome MSA	Herkimer and Oneida
Buffalo PMSA	Erie
Nassau-Suffolk PMSA	Nassau and Suffolk
New York PMSA	Bronx, Kings, New York, Queens, Richmond, Putnam, Rockland and Westchester
Niagara Falls PMSA	Niagara
Orange County PMSA	Orange

NOTE: The Buffalo and Niagara Falls PMSA's comprise the Buffalo-Niagara Falls Consolidated Metropolitan Statistical Area (CMSA). The Nassau-Suffolk, New York, and Orange County PMSA's are part of the New York-Northern New Jersey-Long Island, NY-NJ-CT CMSA, which also includes five PMSA's in New Jersey and four PMSA's in Connecticut.